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Canada

Evaluation of the Canada-British Columbia Labour Market Development Agreement

SYNTHESIS REPORT

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Evaluation Directorate ▸ Strategic and Service Policy Branch

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Evaluation of the Canada-British Columbia Labour Market Development Agreement

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Executive summary

1. Introduction

Employment and Social Development Canada (ESDC) worked jointly with British Columbia and 11 other Provinces and Territories (P/Ts) to undertake the 2012-2017 second cycle of the Labour Market Development Agreement (LMDA) evaluation. The first cycle of LMDA evaluation was carried out between 1998 and 2012 and involved the conduct of bilateral formative and summative evaluations in all P/Ts. Under the second cycle, the evaluation work consisted of conducting two to three studies per year on the Employment Benefits and Support Measures (EBSMs) similar programming delivered under these agreements. The studies generated evaluation evidence on the effectiveness, efficiency and design/delivery of EBSMs for Canada overall, for British Columbia and for the 11 other P/Ts that opted for a joint evaluation process with Canada.

Under LMDAs, Canada transfers $2.14B in Employment Insurance (EI) Part II funds to P/Ts for the design and delivery of programs and services to help unemployed individuals (mainly those eligible under EI) to find and maintain employment.

Programs and services delivered by British Columbia correspond to the EBSM categories defined under the EI Act. The following is a short description of the five categories of programs and services examined in the evaluation:

- **Skills Development (Training Services, including Apprenticeship)** helps participants obtain employment skills by giving them financial assistance in order to attend classroom training.
- **Targeted Wage Subsidies (Wage Subsidy Work Experience Placement)** help participants obtain on-the-job work experience by providing employers with a wage subsidy.
- **Self-Employment** provides financial assistance and business planning advice to participants to help them start their own business.
- **Job Creation Partnerships** provide participants with opportunities to gain work experience that will lead to ongoing employment. Employment opportunities are provided by projects that contribute to developing the community and the local economy.
- **Employment Assistance Services** such as counselling, job search skills, job placement services, provision of labour market information and case management.

Three additional programs and services are available under the LMDAs: Labour Market Partnerships, Research and Innovation and Targeted Earnings Supplements. They were not evaluated as part of this evaluation. The Targeted Earnings Supplements program is not used in British Columbia, and Labour Market Partnerships and Research and Innovation will be evaluated at a later stage.

Table i provides an overview of the share of funding allocated to the five EBSMs examined under the second cycle for LMDA evaluation and the average cost per intervention.

Table i. Share of LMDA funding and average cost per intervention in British Columbia

Program and Service	Share of funding 2014-2015	Average cost per intervention 2002-2005
Training Services (including Apprentices)	51%	$7,452
Employment Assistance Services	34%	$841
Wage Subsidy Work Experience Placement	2%	$4,603
Self-Employment	4%	$11,018
Job Creation Partnerships	2%	$11,187
Total	**93%***	–

Sources: EI Monitoring and Assessment Reports 2002-2003 to 2014-2015.
*Note: Labour Market Partnerships and Research and Innovation (not covered by the evaluation) represented about 7% of Employment Benefits and Support Measures expenditures in 2014-2015.

This report presents a summary of the findings from nine studies produced on British Columbia LMDA interventions and participants. Results are presented for active and former EI claimants as well as for long-tenured workers[1], youth (under 30 years old) and older workers (55 years old and over) when the number of participants was sufficient to conduct quantitative analyses. Active EI claimants are classified as those who were receiving EI benefits at the time of their EBSM participation. Former EI claimants received EI up to three years before starting their EBSM participation.

2. Key findings

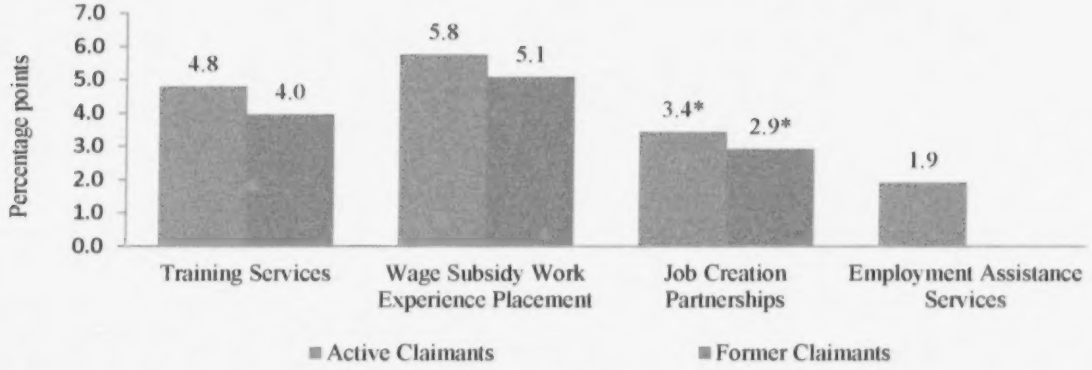
2.1 Effectiveness and efficiency of EBSMs

Incremental impacts and cost-benefit analyses addressed EBSM effectiveness and efficiency. Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of active and former EI claimant participants, including youth and older worker who were active claimant participants. As well, social benefits of participation exceeded the cost of investments for all examined interventions over time. Finally, providing Employment Assistance Services interventions earlier during an EI claim (first four weeks) produced larger impacts on earnings and employment and facilitated earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Figure i presents the incremental impacts on the incidence of employment for active and former claimants by type of program. The estimates can be interpreted as a change in the probability of being employed following participation. For example, participation in Training Services increases the probability of being employed by 4.8 percentage points for active EI claimants relative to unemployed non-participants.

[1] Long-tenured workers covered in the evaluation are individuals who had a long-term attachment to the labour market but not necessarily a long tenure with the same employer.

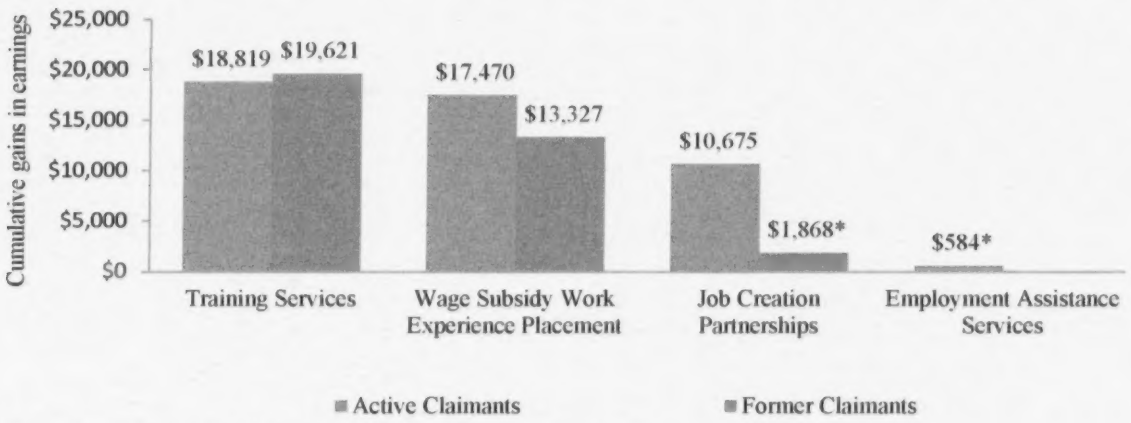
Figure i. Change in probability of being employed in participants relative to non-participants



* The estimates in Figure i are arithmetic averages. The estimates for active and former claimants who participated in Job Creation Partnerships are based on five estimates with different statistical significance levels. For active claimants, one estimate is statistically significant at the 95% confidence level, three estimates are statistically significant at the 90% confidence level and one estimate is non-statistically significant. For former claimants, one estimate is statistically significant at the 90% level and four estimates are non-statistically significant.

Figure ii presents the cumulative increase in employment earnings for active and former claimants over the 5 years post-participation. It is noted that Employment Assistance Services are relatively modest activities and, by themselves, are not expected to lead to substantial effects on labour market outcomes. In other words, these services aim to support the return to work of unemployed participants and not necessarily to secure a better paying job than pre-participation. However, as demonstrated later in the report, providing Employment Assistance Services earlier during the EI claim (first 4 weeks) produced larger impacts on earnings and employment and facilitated earlier returns to work.

Figure ii. Increased cumulative earnings of participants relative to non-participants



* The estimates are not statistically significant at the 95% confidence level.

Table ii presents the number of years required for the social benefits to exceed program cost. Social benefits to participation exceeded investment in a period ranging from less than a year after program participation to about 10 years after participation. This excludes active and former claimants who participated in Job Creation Partnerships, for whom the investment costs are not likely to be recouped before 23.6 years for active claimants, and may never be recouped for former claimants. However, this group represented only 0.2% of new EBSM interventions in 2014-2015.

Table ii. Number of years for the benefits to exceed program costs

	Training Services	Wage Subsidy Work Experience Placement	Job Creation Partnerships	Employment Assistance Services
Active Claimants	6.7	3.2	23.6	9.4
Former Claimants	4.8	0.1	Benefits may never recover the costs	N/A

2.2 Main challenges about program design and delivery

Key informant interviews with service providers and program managers, as well as the documents reviewed and the questionnaires filled by British Columbia representatives, revealed few challenges about program design and delivery:

Training Services

- According to service providers and managers interviewed as part of the evaluation, the main challenges and lessons learned about Training Services design and delivery included:
  - There is an uneven level of experience among caseworkers which require more time and expertise to understand the nuances of the program.
  - The remoteness and more-limited availability of training institutions in rural and remote areas poses challenges to caseworkers.
  - The limits on the financial supports are perceived as being too low.
  - The paperwork associated with the program's application process can be overwhelming for some participants.
  - It is important to have relevant and adequate labour market information on occupations in-demand in the labour market.

Apprentices

- Existing literature showed that there is a fairly high non-completion rate among apprentices in Canada (40-50%).[2] Furthermore, literature revealed that despite the growth in apprenticeship

[2] Red Seal. 2014. Apprenticeship Completion, Certification and Outcomes. Ottawa: Red Seal.

registrations in Canada, there has not been a corresponding increase in completions.[3] While program data does not provide reliable information on completion and non-completion rates of participants, key informants interviewed in the evaluation noted a high non-completion rate among apprentices in British Columbia and identified reasons that could lead them to drop out of the apprenticeship process. These included:

- EI benefits payments may not be sufficient for apprentices while in training.
- Apprentices and employers do not know what supports are available or where they must go to apply for the program.
- Apprentices may not have the necessary essential skills to perform the required work. They may require greater supports and resources as trades are becoming more complex and sophisticated.
- It can be difficult for apprentices to find the time to return to school to complete their training.
- Some training requires the apprentice to relocate to another community and this may be challenging for them.
- Tuition is not an eligible cost and this is a challenge for many apprentices.
- Due to changes in the economy, some apprentices may switch jobs temporarily. This may impact their ability to complete their apprenticeship. As well, some apprentices are taking other employment opportunities outside of their trade.
- Because of the strict apprentice-journeyman ratios, there are not enough journeymen to supervise the apprentices.

Wage Subsidy Work Experience Placement

- While evaluation results have demonstrated the effectiveness of the Wage Subsidy Work Experience Placement program, its use has been falling in recent years. According to the EI Monitoring and Assessment Reports, the number of new program interventions decreased from 3,541 to 1,295 between 2003-2004 and 2014-2015. Key informants identified the following possible factors influencing this decline:
  - Inexperienced service providers.
  - Administrative/reporting burdens on the employers.
  - Lack of awareness about the program.

Employment Assistance Services

- Key informants indicated that service providers are expected to use labour market information to support program delivery. However, they also mentioned that available labour market information is limited. They explained that information on government websites can sometimes be outdated. As well, labour market information is not available at the rural level and is limited at the local level.

- According to key informants, other challenges with respect to the delivery and targeting of Employment Assistance Services included:

[3] Patrick Coe. 2013. "Apprenticeship programme requirements and apprenticeship completion rates in Canada." Journal of Vocational Education and Training. 65(4): 575–605.

- Lack of awareness of the program among EI and income support claimants.
- Administrative burden associated with the new data collection system and bi-weekly follow-up with participants.
- Available funding does not allow for the provision of one-on-one support in the self-service area. As well, not all service providers can afford a specialist for the specialized groups they are mandated to serve.
- Eligibility requirements are seen as being strict.
- Some service providers cover a large rural area and this poses some challenges. In some cases, staff need to drive for two hours in order to meet with participants.
- Participants with multiple barriers to employment often require multiple referrals. Service providers are generally unable to track participants through multiple referrals and lose touch with these individuals.

3. Recommendations

A total of six recommendations emerge from the evaluation findings. They are as follows:

- The study on the timing of Employment Assistance Services participation showed that receiving assistance early after starting an Employment Insurance claim can lead to better labour market impacts. However, key informants reported a lack of awareness about the program.
  - Recommendation 1: Consideration should be given to providing British Columbia with timely access to data on new EI recipients for supporting targeting and increasing awareness.

- Incremental impact results showed improvements in participants' earnings and employment for the Wage Subsidy Work Experience Placement program although its use has been declining in recent years. According to key informants, the decline may be related to factors such as a lack of awareness about the program and the administrative burden on employers.
  - Recommendation 2: British Columbia should explore ways of removing barriers to employer participation in the Wage Subsidy Work Experience Placement program.

- Key informants interviewed in the evaluation confirmed the necessity of having labour market information to support the delivery of Employment Assistance Services. They, however, pointed to the difficulty of accessing and using labour market information, especially at the local level.
  - Recommendation 3: Consideration should be given to enhancing the capacity of service providers to access and produce, when needed, relevant labour market information.

- The evaluation was not able to produce a conclusive assessment of Self-Employment effectiveness and efficiency since the data used to assess impacts on earnings may not be the best source of information available to reflect the financial wellbeing of the participants. As well, it is not clear whether participants' success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills or the assistance provided under Self-Employment.

- Recommendation 4: Consideration should be given to examining in more detail the design and delivery of Self-Employment and whether the performance indicators for this program are appropriate.

- Job Creation Partnerships is provided to a small number of participants and was found to be effective at improving the earnings of active claimants but it increased their use of EI. The program was not effective for former claimants. However, the evaluation has not yet examined the design and delivery of this program. Therefore, a lot remains unknown about how this program operates and the factors that contribute to its effectiveness.
  - Recommendation 5: Consideration should be given to examine the design and delivery of Job Creation Partnerships in order to better understand how this program operates.

- Overall, the LMDA evaluation was able to produce a sound assessment of EBSM effectiveness and efficiency because the team had access to rich data on EI claimants, EBSM participation data and Canada Revenue Agency taxation files. However, some data gaps limited the evaluation's ability to assess how EBSMs operate.
  - Recommendation 6: Improvements in the data collection process are recommended to address key program and policy questions of interest to the federal and provincial/territorial governments. Specifically:
    - Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.
    - Collect data on the type of training funded under Training Services and the type of assistance provided under Employment Assistance Services. British Columbia, ESDC and other P/Ts should work together to define common categories for both EBSMs.

Management response

Introduction

The Synthesis Report and its recommendations have been reviewed and approved by the Ministry of Social Development and Poverty Reduction (the Ministry). The findings and recommendations were well received as the Ministry actively supports an evidence-based approach to program development and improvements.

Significant enhancements have been implemented with the rollout of the Employment Program of British Columbia in 2012, the Ministry's commissioning of an external review titled "Evaluation of the Employment Program of British Columbia" in 2016 and by the subsequent improvements made in response to the review's recommendations[4]. The findings from the external review are in line with those of the Synthesis Report in that the external review recognized program features introduced with the launch of the Employment Program of British Columbia in 2012. The Ministry continues to refine its approach over the life of the program and since the external review.

Some of the actions that British Columbia has taken related to recommendations in the Evaluation of the Canada-British Columbia LMDA as prepared by the Evaluation Directorate, Strategic and Service Policy Branch of ESDC are detailed below. These examples are intended to demonstrate British Columbia's shared priorities with ESDC (relative to the state of the program before 2012, as the Synthesis Report addresses), the actions taken to address these priorities and a willingness to continue to focus on program improvement.

Six recommendations for British Columbia:

1. **Consideration should be given to providing British Columbia with timely access to data on new EI recipients for supporting targeting and increasing awareness.**

    - British Columbia acknowledges the importance of early intervention and together with the federal government has been working to channel EI recipients to the Employment Program of British Columbia sooner through the Targeting, Referral and Feedback initiative. The initiative was launched in the fall of 2016 and 95% of WorkBC Employment Services Centre locations are participating. The process is that ESDC sends referrals to WorkBC Employment Services Centre service providers, who in turn reach out to referred EI clients and provide them with information on Employment Program of British Columbia services. Of the approximately 1,200 clients that have completed Employment Program of British Columbia services through the initiative, 72% have attained employment.

    - In the fall of 2017 the Forum of Labour Market Ministers Secretariat and ESDC hosted an information session with all the Provinces and Territories of Canada. British Columbia shared its experience on the Targeting, Referral and Feedback implementation process, as other provinces and territories are now looking to implement their own Targeting, Referral and Feedback initiatives.

[4] "Evaluation of the Employment Program of British Columbia" can be found at the website of the Ministry of Social Development and Poverty Reduction.

2. **British Columbia should explore ways of removing barriers to employer participation in the Wage Subsidy Work Experience Placement program.**

   - British Columbia agrees with the importance of providing wage subsidy supports. This is evidenced by the extensive collaboration that has been undertaken with WorkBC service providers to identify, reduce and remove barriers to providing wage subsidy and work experience supports, including streamlining application processes and reducing administrative burden.

   - Between 2012/2013 (the launch year of Employment Program of British Columbia) and 2016/17, the number of clients per year participating in wage subsidy placements grew by approximately 70%.

3. **Consideration should be given to enhancing the capacity of service providers to access and produce, when needed, relevant labour market information.**

   - British Columbia is fully supportive of this notion. Steps taken to address the need for labour market information include:
     - Production of an internal Monthly Management Report, which provides timely Employment Program of British Columbia data as well as an overview on the provincial labour market.
     - The WorkBC website provides dynamic information on employment services, training, the British Columbia economy, the labour market outlook, jobs in demand, industry and regional level information and more[5].
     - Local WorkBC Employment Services Centre service providers are uniquely positioned to obtain community-specific information. As such, they are required to develop and share with the Ministry, an Annual Community and Employer Partnership Plan that details local community labour market needs, responses to labour market changes, community and employer activities to address labour market needs, and strategies employed to meet the needs of designated groups in the community.
     - The Ministry presents labour market and program information at the Corporate Program Advisory Committee meeting that includes representation from all service providers and ministry staff.

4. **Consideration should be given to examine in more detail the design and delivery of Self-Employment and whether the performance indicators for this program are appropriate.**

   - British Columbia continues to monitor the self-employment program. British Columbia's experience has been that the program can be administratively complex and requires significant expertise by service providers.

   - The uptake for self-employment services has increased marginally due to efforts undertaken by the Ministry and service providers to build the knowledge needed to effectively deliver complex self-employment services and appropriately measure

[5] From the WorkBC website

performance. On average, uptake of the service has grown approximately 6% annually over the last three fiscal years. While self-employment clients nevertheless remain a relatively small contingent of Employment Program of British Columbia, the impact of self-employment and drivers of its success continue to be evaluated.

5. **Consideration should be given to examine the design and delivery of Job Creation Partnerships in order to better understand how this program operates.**

   - Since the launch of Employment Program of British Columbia in 2012, the Province has entered into 209 Job Creation Partnership agreements with almost 1,000 individuals participating. A process was undertaken to identify efficiencies in the delivery of this program and was able to reduce application processing times by more than half, thus increasing the overall number of projects being approved. The Ministry will continue to assess the Job Creation Partnerships program and its efficacy.

6. **Improvements in data collection are recommended to address key program and policy questions of interest to the federal and provincial/territorial governments. Specifically:**

   - **Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.**

   - **Collect data on the type of training funded under Training Services and the type of assistance provided under Employment Assistance Services. British Columbia, ESDC and other provinces and territories should work together to define common categories for both EBSMs.**

     - In principle, British Columbia has agreed to endorse the Performance Measurement Strategy that will be associated with the renewed labour market transfer agreements. With the implementation of the new Performance Measurement Strategy, detailed performance indicator information identifies data collection methodologies, frequency of reporting, data sources and data elements for all programs and services as well as participant and employer indicators under the amended LMDA.

1. Introduction

Employment and Social Development Canada (ESDC) worked jointly with British Columbia and 11 other Provinces and Territories (P/Ts) to undertake the 2012-2017 second cycle for the Labour Market Development Agreement (LMDA) evaluations. The first cycle of LMDA evaluation was carried out between 1998 and 2012 and involved the conduct of bilateral formative and summative evaluations in all P/Ts. Under the second cycle, the evaluation work consisted of conducting two to three studies per year on the Employment Benefits and Support Measures (EBSMs) similar programming delivered under these agreements. The studies generated evaluation evidence on the effectiveness, efficiency and design/delivery of EBSMs for Canada, British Columbia and for the 11 other P/Ts that opted for a joint evaluation process with the Government of Canada.

This report presents a summary of the findings from the studies conducted for British Columbia and it is organised as follows:

- Introduction with an overview of the studies summarized in this report including their scope and methodology, and contextual information on the LMDAs.
- Finding section with a discussion around the rationale for investing in labour market programming and a summary of evaluation evidence.
- Comparison of key findings by program type.
- Conclusions and lessons learned.
- Recommendations that emerge from the evaluation findings and areas for future investigation.

1.1 Labour Market Development Agreement background

LMDAs are bilateral agreements between Canada and each P/T and were established under Part II of the 1996 Employment Insurance (EI) Act. As part of these agreements, Canada transfers $2.14B annually in EI Part II funding to P/Ts in order to design and deliver programs and services to assist individuals to prepare for, obtain and maintain employment. Specifically, British Columbia receives approximately $280M in EBSM funding each year.

The Canada-British Columbia LMDA was signed on February 9, 2009. The agreement transferred responsibility for the design and delivery of programs and services to British Columbia. Programs and services are classified under two categories: 1) Employment Benefits and 2) Support Measures.

Employment Benefits

Employment Benefits funded under the LMDA are offered to unemployed individuals who 1) are actively on EI (in other words, active claimants); 2) ended their benefit period within three years before participating (in other words, former claimants); or 3) established a claim for maternity or parental benefits within the past five years and are returning to the labour force for

the first time (in other words, former claimants)[6]. Employment Benefits include the following categories:

- **Skills Development (Training Services, including apprenticeship)** helps participants obtain employment skills by giving them financial assistance that enables them to select, arrange and pay for classroom training.
- **Targeted Wage Subsidies (Wage Subsidy Work Experience Placement)** helps participants obtain on-the-job work experience by providing employers with financial assistance to help with the wages of participants.
- **Self-Employment** provides financial assistance and business planning advice to EI-eligible participants to help them start their own business. This financial assistance is intended to cover personal living expenses and other expenses during the initial stages of the business.
- **Job Creation Partnerships** provides participants with opportunities to gain work experience that will lead to ongoing employment. Employment opportunities are provided by projects that contribute to developing the community and the local economy.
- **Targeted Earnings Supplements** encourages unemployed persons to accept employment by offering them financial incentives. This program was not offered in British Columbia and therefore not covered by the evaluation.

Support Measures

Support Measures are available to all unemployed individuals including those not eligible to receive EI and include:

- **Employment Assistance Services** such as individual counselling, action planning, help with job search skills, job-finding clubs, job placement services, the provision of labour market information, case management and follow-up.
- **Labour Market Partnerships** provides funding to help employers, employee and employer associations, and communities improve their capacity to deal with human resource requirements and implement labour force adjustments. These partnerships involve developing plans and strategies, and implementing labour force adjustment measures. This support measure was not covered by the evaluation.
- **Research and Innovation** supports activities that identify better ways of helping people prepare for or keep employment and be productive participants in the labour force. Funds are provided to eligible recipients to enable them to carry out demonstration projects and research for this purpose. This support measure was not covered by the evaluation.

In British Columbia, EBSM-similar programming funded under the LMDA as well as all other employment and labour market services funded under other federal or provincial initiatives were amalgamated in April 2012 and are now delivered through one program called the Employment Program of British Columbia.

[6] Former claimants who received maternity or parental benefits were not covered by the evaluation given the difficulty in finding a suitable comparison group.

Table 1 provides an overview of the share of funding allocated to the five programs and services examined under the second cycle for LMDA evaluation and the average cost per intervention. It is noted that the average cost per intervention was calculated based on the 2002-2005 data from the EI Monitoring and Assessment Reports. The 2002-2005 period corresponds to the cohort of participants selected for incremental impacts and cost-benefit analysis in the LMDA evaluation.

Table 1. Share of LMDA funding and average cost per intervention in British Columbia

Program and Service	Share of funding 2014-2015	Average cost per intervention 2002-2005
Training Services (including Apprentices)	51%	$7,452
Employment Assistance Services	34%	$841
Wage Subsidy Work Experience Placement	2%	$4,603
Self-Employment	4%	$11,018
Job Creation Partnerships	2%	$11,187
Total	**93%***	–

Sources: EI Monitoring and Assessment Reports 2002-2003 to 2014-2015.
* Note: Labour Market Partnerships and Research and Innovation (not covered by the evaluation) represented about 7% of Employment Benefits and Support Measures expenditures in 2014-2015.

1.2 Methodology

This section presents key aspects of the quantitative analyses carried out as part of the LMDA studies, while a more detailed description of the methodology is provided in Appendix A.

All quantitative analyses were based on administrative data from the EI Part I (EI claim data) and Part II (EBSM participation data collected by British Columbia and transferred to ESDC) databanks, linked to T1 and T4 taxation files from the Canada Revenue Agency. Incremental impact analyses and the cost-benefit analyses were based on up to 100% of participants in the reference period selected.

Incremental impacts analysis

Four studies assessed program effectiveness by estimating incremental impacts from EBSM participation on participants' labour market experience (such as earnings from employment/self-employment, incidence of employment, use of EI or social assistance and dependence on income support) after participation. The role of the incremental impact analysis is to isolate the effects of participation from other factors such as the economic cycle. In order to achieve this, the incremental impact analyses compared the labour market experience of participants before and after their participation with that of non-participants (see the example of incremental impact calculation in Figure 1).

The matching of participants and comparison group members used up to 75 socio-demographic and labour market variables observed over five years before participation. Two different

comparison groups were used to measure impacts for active and former EI claimants. For active claimants, the incremental impacts were measured relative to a comparison group of active claimants who were eligible to participate in EBSMs but did not during the reference period.

Former claimants can be underemployed and unable to requalify for EI, out of the labour force for various reasons or on social assistance. Based on previous evaluation methodologies, on expert advice and given the difficulty in generating a suitable comparison for former claimants using administrative data alone, the comparison group for former claimants was created using individuals who participated in Employment Assistance Services only during the reference period. This is a conservative approach given the fact that participation in Employment Assistance Services can lead to limited effects on labour market outcomes. In other words, the experience of former claimants who received Employment Benefits (Training Services, Wage Subsidy Work Experience Placement, Self-Employment or Job Creation Partnerships) was compared to the experience of former claimants who received low intensity employment services (Employment Assistance Services only). Due to this difference in measurement, incremental impacts estimated for active claimant participants should not be directly compared to those of former claimant participants[7].

Figure 1. Example of incremental impact calculation

Factors accounted for in the cost-benefit analysis

Program efficiency was assessed through a cost-benefit analysis which compared the cost of participating in the program for the participants and the cost of delivering the program for the government to the benefits generated by the program. Overall, these analyses provided insight on the extent to which the program is efficient for society (that is, for both the participants and the government). The costs and benefits accounted for in the calculations were as follows (see detailed definitions in Appendix A):

- Program cost: includes program and administration costs paid by the government.

[7]Full details about the incremental impact methodology can be found in the following report: Stream 1 study for 2013-2014: national level analysis of EBSM incremental impacts. Methodology report, Evaluation Directorate, ESDC. September 16, 2013.

- Marginal social costs of public funds: represent the loss incurred by society when raising additional revenues such as taxes to fund government programs.
- Employment earnings: consist of incremental impacts on participants' earnings during and after participation. The calculation accounts for the participant's foregone earnings during participation (in other words, opportunity cost). Employment earnings were also increased by 15% to account for fringe benefits such as employer-paid health, life insurance and pension contributions.

Strengths and limitations of the studies

One of the key strengths of the studies is that all quantitative analyses were based on administrative data rather than survey responses. Compared to survey data, administrative data are not subject to recall errors or response bias.

The propensity score models used to match participants and non-participants for the incremental impact analyses are judged to be robust in part because they were based on five years of pre-participation data and on a vast array of variables including socio-demographic characteristics, location, skills level related to last occupation and indicators of labour market attachment. Sensitivity analysis and the use of alternative estimation methods have increased confidence in the incremental impact estimates. However, one limitation with the propensity score matching technique is that one cannot be fully certain that the impacts were not influenced by factors not captured in the data.

The cost-benefit analysis accounted for all quantifiable costs and benefits that are directly attributable to the EBSMs and that could be estimated with the available administrative data. The analyses did not account for non-quantifiable benefits such as improvements in participant's wellbeing or for the multiplier effect of increased spending on the economy.

It should be noted that it is not possible to produce an analysis of the incremental impacts of Apprentices program participation. Assessing these impacts poses a methodological challenge because program participants are already employed and are expected to return to their employment after completing their training. Therefore, expected labour market impacts cannot be examined using a similar approach as for other EBSMs, which are expected to help participants return to employment. As well, the data available does not permit the identification of a proper comparison group since program participants alternate between work and training and no other potential counterfactuals have similar employment and training patterns. In this context, it is possible to provide an analysis of labour market outcomes associated with program participants but not possible to produce estimates of program effectiveness. While outcomes can provide some insights about the labour market experience of participants before and after participation, it is not possible to attribute the change observed in the outcomes to program participation. For example, a change in average annual earnings from before to after participation could be due to program participation or to other factors such as the maturation effect of youth, the economic cycle, lay off, etc.

When interpreting qualitative findings, readers should keep in mind that these are based on the perception of a small number of key informants who are directly involved in the design or

delivery of the program. Their perception may be representative of their own region or community but not necessarily of the entire province. Since the number of key informants interviewed in each study is small (ranging between 8 and 11), the number of informants who reported a specific finding is not indicated in the report. However, the report notes when there was a clear disagreement between key informants.

1.3 Overview of the studies summarized in this report

Findings presented in this report were drawn from nine separate studies produced on British Columbia LMDA interventions and participants. These studies examined issues related to program effectiveness, efficiency, design/delivery and used a mix of qualitative and quantitative methods. Each study examined evaluation issues in relation to active and former EI claimants.

Table H1 in Appendix H presents an overview of these studies, including the type of evidence generated, the methods used, the reference period and the length of the post-program period over which program effects were observed.

2 Evaluation findings

2.1 Rationale and labour market context

Active labour market programs aim to help unemployed or underemployed individuals find and maintain employment. These programs are fairly similar across Organization for Economic Co-operation and Development countries and consist of skills training in a classroom setting, work experience with employers (often subsidized) or in the public/non-profit sector, return-to-employment assistance and self-employment assistance. EBSM programs and services that are offered to active and former EI claimants are considered active labour market programs and are primarily funded under the LMDA.

In British Columbia, the Ministry of Social Development and Social Innovation is responsible for the design and delivery of the employment programs and services designed to assist British Columbia residents to achieve employment as quickly as possible, and to become more independent. As of April 2, 2012, all employment and labour market services were amalgamated and delivered through one Program called the Employment Program of British Columbia.

The labour market outlook for the province forecasts 934,000 job openings by the year 2025[8]. Most of these jobs will require high levels of education and occupational skill – over one-third will require some level of university degree, and even more positions (42%) will require diploma certificates or trades apprenticeship training. Along with this skill-biased technological change, British Columbia also faces an aging workforce that will leave a gap of experience and skills in the labour market in the coming decades. Of the nearly one million forecasted job openings over the next ten years, the replacement of retired workers (and deaths) counts for over two-thirds. Clearly, increasingly higher levels of educational attainment and occupational skill are becoming imperative to meaningful participation in the current and future labour market.

The Ministry of Social Development and Social Innovation identifies four key labour market priorities which support the government's commitment to strengthening British Columbia's labour market by "delivering responsive programs and services [that] better align skills training with local labour market needs and priorities."[9] The priorities for 2015/16 included:

- Investing in training to better align British Columbians with sustainable job opportunities and to meet employer demands.
- Continual development of strategies to engage all British Columbians, including underrepresented groups.
- Continue partnering with local communities and organizations to further develop and increase community-based partnerships across the province.
- Continue enhancing Employment Program of British Columbia's services and supports through improvement of research and innovation, measurement, and reporting capabilities.

The incremental impacts reported in the LMDA evaluation and discussed in this report demonstrate that, in general, LMDA-funded programs and services delivered in British

[8] Government of British Columbia. Work BC's "British Columbia 2025 Labour Market Outlook".
[9] Government of British Columbia "2015/16 Annual Plan for the Labour Market Development Agreement (LMDA)".

Columbia are improving participants' labour market experience following participation and contributing to meet the key labour market priorities of the Ministry of Social Development and Social Innovation.

2.2 Training Services

2.2.1 Program description

Based on a document review and 11 key informant interviews completed in summer 2015

In British Columbia, Training Services provide services and supports to assist eligible participants to access a range of different types of training. The specific training must have a strong likelihood of supporting the participant to achieve sustainable employment. Supports provided under the program cover the following expenses:

- Living supports
- Transportation/commuting
- Dependent/childcare
- Employment-related disability supports
- Tuition
- Books and supplies
- Living away from home allowance
- Other incidental training-related costs and fees

The duration of these supports is for a maximum of 3 years. However, the average duration of the training is generally 2 years. The financial supports are available only during the training program.

Training supported under the program includes Basic and Essential Training (including English as a Second Language and Academic Upgrading) and Occupational Skills Training (demand-driven training leading to certification).

All training supported under the program must be part of a defined curriculum and:

- Lead to a certificate, diploma or degree. Participation in a degree-granting program is only permitted in exceptional circumstances.
- Be delivered by either a public training institute or a private training institute that meets requirements of the Private Career Training Institutions Act (or is exempt from meeting these requirements).

2.2.2 Program delivery

Based on a document review and 11 key informant interviews completed in summer 2015

To begin the Training Services application process, caseworkers meet with unemployed individuals seeking assistance and explain what programs and services are available to assist the individual. The individual may also apply online and access program supports and services without being case-managed.

Case-managed individuals and their caseworkers develop a return-to-work-action-plan with goals that match the individual's interest and the needs of employers. The return-to-work-action-plan may include a recommendation to attend training if there is a gap between existing skills and the needs of the labour market.

The caseworker examines the individual's skills level and work experience by conducting various assessments such as a needs assessment, employment-readiness and career-planning assessment and a psychological-educational assessment. The caseworker provides labour market information and support for the labour market research component of the application process. For example, the case worker provides information on training institutions, employers, and occupations as well as student loans. The caseworker measures eligibility based on a participant's need and suitability, labour market and occupation research, financial feasibility, training course, institution suitability and other program requirements.

The prospective participant conducts research to ensure that the training will meet their employment needs and objectives, help achieve labour market self-sufficiency and better prepare them for labour market participation. The prospective participant is normally responsible for identifying their own training needs and developing skills for the labour market themselves.

The caseworker confirms the participant's EI eligibility through the British Columbia Ministry of Social Development and Social Innovation and conducts a financial assessment to determine the various types and levels of supports available to the participant. The caseworker and the participant negotiate the amount of financial support and develop an agreement outlining the exact amount of financial support, each party's responsibilities and monitoring requirements.

2.2.3 Targeting to labour market demand

Based on a document review and 11 key informant interviews completed in summer 2015

Program participants conduct labour market research as part of the application process to ensure a direct link between their requested training and in-demand occupations. The caseworker assesses the individual's skill levels and work experience, as well as the local labour market demand, as part of the case management process.

2.2.4 Profile of Training Services participants

Socio-demographic characteristics

As shown in Table B1 in Appendix B, active claimants who started their Training Services intervention between 2002-2005 or 2007-2008 were mainly female (53% and 62% respectively), with the majority of participants between 25 and 44 years old (60% and 58% respectively). Participants in both cohorts most frequently occupied jobs requiring secondary school or occupational training in the year before starting participation (41% and 40% respectively).

Former claimants who started program participation either between 2002-2005 or 2007-2008 were also mainly female (55% and 66% respectively) and most participants were aged 25 to 44 years old (65% and 64% respectively). Participants most frequently occupied jobs in the year before participation that required secondary school or occupational training (42% and 40% respectively).

Barriers faced by participants

Based on a document review and 11 key informant interviews completed in summer 2015

Key informants were asked to identify the main barriers to employment or to accessing and completing training faced by Training Services participants. The most commonly-identified barriers were:

- Funding for tuition is capped at $7,500, which can be a barrier when the overall cost of the tuition is more expensive or when the participant has family responsibilities.
- Lack of training opportunities in local communities.
- Individuals with poor financial planning skills may face financial challenges while in training.
- Long-tenured workers often lack the formal certification required by employers.
- Having a disability and being unable to perform work duties.

2.2.5 Incremental impacts

Active claimants

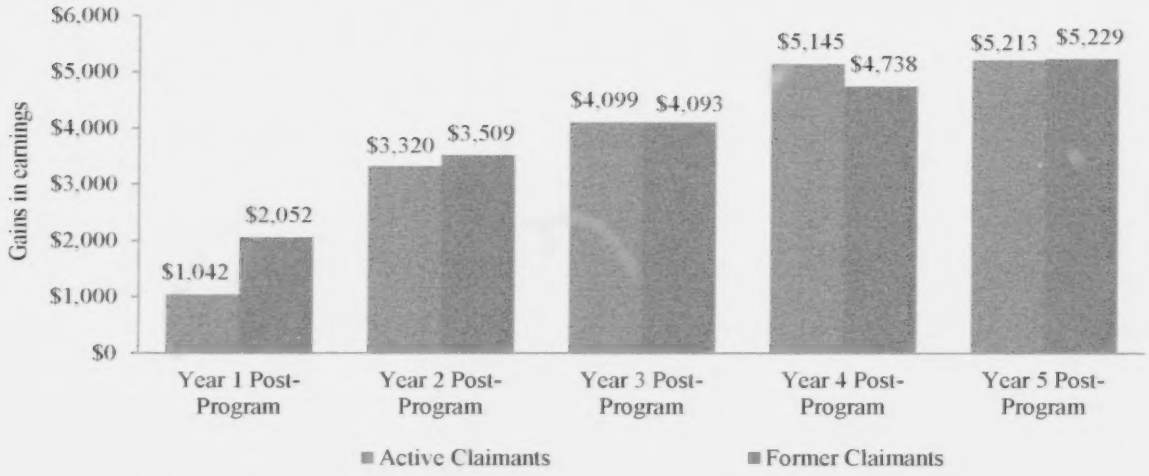
As shown in Table B2 in Appendix B, active claimants who started their Training Services participation between 2002 and 2005 had incremental gains in earnings and incidence of employment in each of the five years after participation. As shown in Figure 2, these gains in earnings increased continuously over time and ranged from $1,042 in the first year after participation to $5,213 in the fifth year. Similarly, increases in annual incidence of employment ranged between 4.0 and 5.5 percentage points over the five years after participation.

Gains in employment earnings and incidence of employment were accompanied by decreases in the use of EI (cumulative of $921) and social assistance (cumulative of $234), and in the level of dependence on government income support over the five years following participation.

Active claimants who started their Training Services intervention between 2007 and 2008 also had incremental gains in earnings and incidence of employment in each of the three years after participation. Participants also decreased their use of EI and social assistance, as well as their dependence on income support, in each of the three post-program years.

Overall, active claimants increased their labour market attachment through increases in earnings, incidence of employment and decreases in the level of dependence on government income support (use of EI and social assistance).

Figure 2. Increased earnings of active and former Training Services participants relative to non-participants[10]



Results for sub-groups of active claimants were as follows:

- Youth (Under 30 years old) who started their Training Services participation in the 2002-2005 period had incremental gains in earnings and incidence of employment, as well as decreased social assistance use and overall dependence on income support, in all five years after participation. EI use also decreased in the short-term (first and second years post-program) for these participants.
- Older workers (55 years old and over) who began their intervention in the 2002-2005 period also had incremental gains in earnings and incidence of employment in all post-program years. The amount of EI benefits claimed by these participants increased over the latter post-program years (third, fourth, and fifth year). Most results for social assistance use and dependence on income support were non-statistically significant.
- Long-tenured workers who started program participation between 2007 and 2009 had incremental gains in earnings in the second and third years after participation, as well as gains in incidence of employment in all years post-program. They also reduced their annual number of weeks spent on EI and their overall level of dependence on income support in the first two years after participation.

Former claimants

Former claimants who started participation in Training Services between 2002 and 2005 had incremental gains in earnings and incidence of employment in all five years after participation Gains in earnings ranged between $2,052 in the first year after participation to $5,229 in the fifth year (Figure 2). As well, participants had gains in their incidence of employment that ranged between 3.5 and 4.7 percentage points over the five year post-program period (see Table B3 in

[10] Incremental impacts on earnings are estimated relative to pre-participation levels and to the comparison group. They are estimated using current dollars.

Appendix B). Former claimants also decreased their use of social assistance in all years post-program by a cumulative $923, as well as reduced their dependence on income support over most years following program participation.

While EI use by these former claimants decreased in the first year after participation, it then increased over the remaining post-program years (by annual averages ranging from $175 to $249), indicating the inability by some to maintain the employment that they secured in the short term. It can also be argued that an increase in EI use is an indication of increased labour market attachment for this client group since they did experience increases in employment earnings and incidence of employment as well as a decrease in the use of social assistance. As a reminder, former claimants are participants for whom the EI benefit period ended up to three years pre-participation.

Former claimants who started their training services intervention in 2007 or 2008 followed similar trends with respect to gains in earnings and incidence of employment and decreases in social assistance use and dependence on income support over all post-program years. Like the 2002-2005 participants, these former claimants had short-term decreases in EI use.

Results for sub-groups of former claimants were as follows:

- Youth who started their Training Services participation between 2002 and 2005 had gains in earnings in all five years post-program, as well as gains in incidence of employment over most of the post-program period. They also decreased their use of social assistance in all post-program years and their dependence on income support over most post-program years. Results for EI use were mixed with increases, decreases and non-statistically-significant estimates.
- Incremental impacts for long-tenured workers who started their program participation in the 2007-2009 period were non-statistically significant for the entire three years post-participation.
- Incremental impacts for older workers were not produced as the number of participants was too small.

2.2.6 Cost-benefit results

From the social perspective, the benefits of Training Services for active claimants would need to be maintained over 6.7 years after participation in order to match the costs of the program (see Table B4 in Appendix B).

For former claimants, the benefits of Training Services recovered the costs of the program 4.8 years after participation. Six years after participation, the benefits exceeded the costs by $5,230.

2.2.7 Challenges and lessons learned about Training Services design and delivery

Based on a document review and 11 key informant interviews completed in summer 2015

Key informant interviews with managers and caseworkers identified the following challenges related to the design and delivery of Training Services:

- There is an uneven level of experience among caseworkers. Some are less familiar with the program and require more time and expertise to understand the nuances of the program. The Ministry has been conducting meetings, conferences and training to support caseworkers.
- Geographic location, remoteness and the availability of training institutions have direct impacts on service delivery in rural and remote areas and pose challenges to caseworkers.
- The limits on the financial supports are perceived to be too low.
- Some participants may be overwhelmed by the paperwork associated with the application process. As well, the monitoring requirements may be cumbersome for some participants.

Key informants also identified a number of lessons learned:

- It is important to have adequate labour market information about occupations in demand in the labour market.
- Ensure caseworkers are familiar with the program, aware of current labour market information, and are fully engaged to support participants.
- Develop and maintain a close relationship between caseworkers and financial support contacts to facilitate adjustments to the level of the financial assistance needed by participants if their situation changes.
- Have a well-structured yet simple and flexible application process with specific forms and steps to ensure participants' commitment to the program.
- Provide career planning as part of the Training Services application process to avoid having the participant lose interest after beginning their training. Offering financial planning during the application process is helpful as well.
- Minimize the frequency of changes made to the program (for example, monitoring requirements, data collection, administrative procedures, etc.).
- Promote successes from the program as part of an outreach strategy.
- Provide flexibility regarding the type of training institutions (public, private, accredited and non-accredited) that can be supported in rural and remote areas where access to training and training options are limited.

Key informants provided a variety of suggestions that could help program participants to access or complete their training. The suggestions included:

- Increasing the level of various financial supports (for example, transportation, tuition, etc.) and extend the duration of living expenses to cover the job search period following completion of training.
- Providing caseworkers with the flexibility to adjust the level of support based on the participants' needs.
- Providing online courses and ensuring adequate access to the internet in rural communities.

- Supporting relocation costs to increase access to training for individuals living in rural and remote areas.

2.3 Apprentices Program

2.3.1 Program description

Based on a document review and 10 key informant interviews completed in summer 2015

In British Columbia, the Apprentices program is a form of post-secondary education that combines paid work-based training with technical training in a classroom setting (that is, block release training). If eligible, apprentices may apply for financial supports during their block release training.

The objective of the Apprentices program is to assist eligible individuals to complete the classroom/technical component of their apprenticeship trade to achieve journeyman status. These services are also intended to assist individuals who do not have a sponsor (or may have lost their employer sponsorship due to lay-off) to access case management services to help them establish an employer relationship. This service supports individuals in improving their employment readiness by developing skills for occupations that provide sustainable employment.

To be eligible to receive Apprentices program support, individuals must meet all of the following criteria:

- Active or former EI claimants.
- Registered with the Industry Training Authority.
- Approved for block training.
- Sponsored by an employer, trade association or a training provider.

The program provides financial assistance to apprentices to help them offset the costs they incur while they are released from employment to attend in-class technical training. The level of financial support is determined according to provincial guidelines. It covers the following expenses:

- Transportation/travel.
- Childcare and/or dependent care.
- Living-away-from-home allowance.
- Living allowance, which can be used to top-up benefits for active EI claimants or to replace EI benefits once they are exhausted (also provided to former claimants).
- Disability-related costs.

2.3.2 Program delivery

Based on a document review and 10 key informant interviews completed in summer 2015

The responsibilities for the delivery of the Apprentices program are divided between different entities:

- Financial assistance for apprentices during their block training is administered through the British Columbia Ministry of Jobs, Tourism and Skills Training. The Ministry verifies EI eligibility and approves applications for apprenticeship training.

- The Industry Training Authority provides services to apprentices such as registration, exam coordination, assessment and certification. It also ensures the application process is streamlined and supports are available while apprentices are in training. The Industry Training Authority issues credentials and sets program standards for apprenticeships in British Columbia.
- Service providers offer information to apprentices at local training facilities in the community regarding available program supports.

Apprentices can be either case managed or non-case managed. The delivery process is different for each group.

- **Case managed apprentices**: Case managed apprentices are generally unemployed. Service providers work with the individuals to assess their needs to ensure that apprentice training is appropriate. Case managed apprentices conduct labour market research, informational interviews, prepare justifications and consider the likelihood of obtaining employment at the end of the training. Service providers also process the apprenticeship application for case managed apprentices. These applicants do not apply through the online portal. According to key informants, the number of case managed apprentices is very small.
- **Non-case managed apprentices**: These apprentices are employed and they apply for apprentice training and supports online. The applicants who have been approved to receive EI Part I benefits by Service Canada must apply for apprentice supports online at least 4 weeks prior to the course start date.

2.3.3 Profile of Apprentices participants

Socio-demographic characteristics

As shown in Table C1 in Appendix C, the vast majority of active claimants who started their Apprentices program participation in 2003-2005 or 2013-2014 were male (96% and 92% respectively). Those who started the program between 2003 and 2005 were younger on average, with 50% of participants under 25 years old compared to 18% of the 2013-2014 cohort. Over half (58%) of 2013-2014 participants were between 25 and 34 years of age, compared to 37% for the 2003-2005 participants. Before participation in the Apprentices program, most participants in both cohorts (86% and 89% respectively) had occupations that required college or apprenticeship training.

The vast majority of former claimants who started Apprentices program participation either in 2003-2005 or 2013-2014 were male (92% and 90% respectively). Those who started between 2003 and 2005 were slightly younger than the 2013-2014 cohort, with 81% of 2003-2005 participants aged 34 or younger compared to 73% of 2013-2014 participants. Before starting the program, former claimants in both cohorts most frequently had a job requiring college or apprenticeship training, though the proportion was much higher for 2013-2014 participants (64%) than 2003-2005 participants (39%). In contrast, 33% of the 2003-2005 cohort had an occupation with secondary or occupational training as the highest level of required skill compared to 14% of 2013-2014 participants.

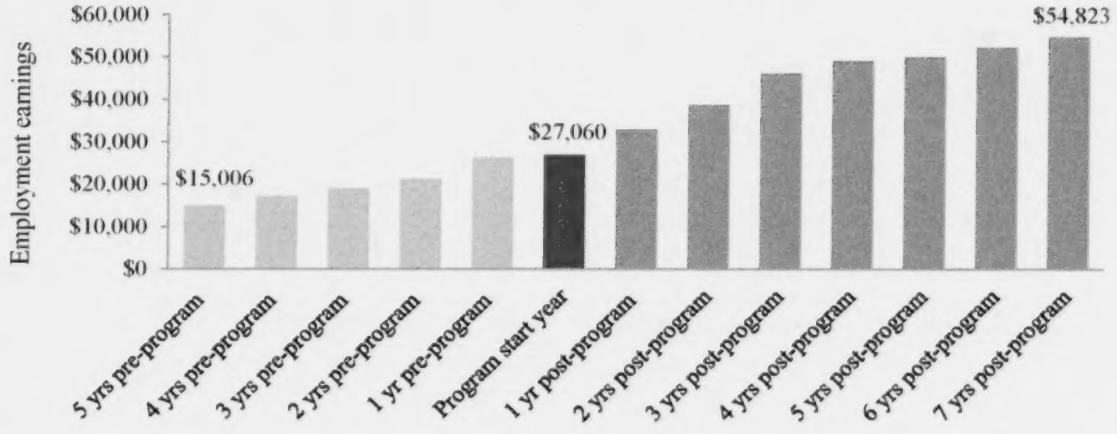
2.3.4 Labour market outcomes

Tables C2 and C3 in Appendix C present the labour market outcomes for active and former EI claimants who started their Apprentices participation during the 2003-2005 period.

Active claimants

As shown in Figure 3, average annual earnings of active claimant program participants increased steadily from $15,006 in the fifth year pre-program to $54,823 in the seventh year after the program start year. While the proportion of participants employed declined in the years following program participation, it remained above 90% in all seven years after the program start year. The average proportion of participants on EI steadily decreased in the years after program participation to 20% by the seventh year after the program start year. The proportion of participants reporting self-employment activities increased during the post-program period, while the proportions depending on social assistance and income supports overall was lower on average during the post-program period.

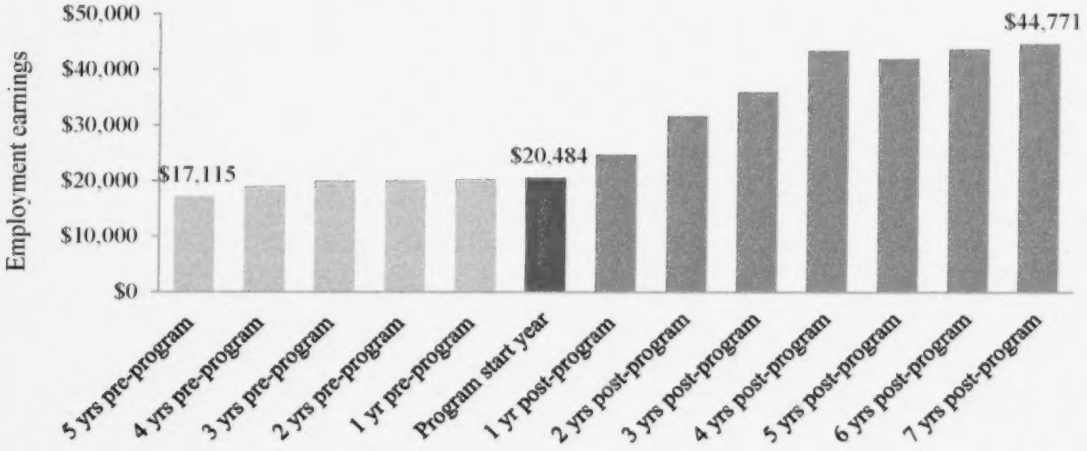
Figure 3. Average earnings for active claimant participants in Apprentices (in current dollars)



Former claimants

Average annual earnings for former claimant program participants (shown in Figure 4) increased from $17,115 in the fifth year pre-program to $44,771 in the seventh year after the program start year. As with active claimants, the proportion of employed former claimant participants declined in the seven years after program participation but remained above 90%. The proportion of participants in receipt of EI benefits increased over the first two years after the program start year (from 44% to 65%) but then declined to 36% by the seventh year after participation. The proportion of former claimant participants reporting self-employment activities was also higher during the post-program period, and the proportion on social assistance lower. The level of dependence on income support for former claimants was similar before participation (ranging between 8% and 13%) and after participation (ranging between 7% and 13%).

Figure 4. Average earnings for former claimant participants in Apprentices (in current dollars)



2.3.5 Challenges and lessons learned about Apprentices design and delivery

Based on a document review and 10 key informant interviews completed in summer 2015

Existing literature has shown that there is a fairly high non-completion rate among apprentices in Canada (40-50%)[11]. Furthermore, literature revealed that despite the growth in apprenticeship registrations in Canada, there has not been a corresponding increase in completions[12]. While program data do not provide reliable information on completion and non-completion rates of participants, most key informants interviewed in the evaluation noted a high non-completion rate among apprentices in British Columbia and identified reasons that could lead them to drop-out from the apprenticeship process. These responses included (each mentioned by 8 key informants or less):

- EI rates may not be sufficient for apprentices during training. Apprentices may experience a substantial drop in wages which is exacerbated when EI cheques are delayed.
- There is lack of awareness and confusion regarding the program. Apprentices and employers do not know what supports are available or where they must go to apply for the program.
- Apprentices may not have the necessary essential skills to perform the required work. They may require greater supports and resources as trades are becoming more complex and sophisticated with computers, and therefore a higher level of skills is needed now as compared to in the past.
- Apprentices experience difficulty finding the time to return to school to complete their training.
- Some training requires the apprentice to relocate to another community and this may be challenging for them (especially for those from rural locations).

[11] Red Seal. 2014. Apprenticeship Completion, Certification and Outcomes. Ottawa: Red Seal.
[12] Patrick Coe. 2013. "Apprenticeship programme requirements and apprenticeship completion rates in Canada." Journal of Vocational Education and Training. 65(4): 575–605.

- Tuition is not an eligible cost and this is a challenge for many apprentices.
- Due to changes in the economy, some apprentices may switch jobs temporarily and this may impact their ability to complete their apprenticeship. As well, some apprentices are taking other employment opportunities outside of their trade.
- Because of the strict apprentice-journeyman ratios, there are not enough journeymen to supervise the apprentices.

Key informants also identified challenges with the design and delivery of the Apprentices program. They spoke about a lack of open communication between the training institutions and Industry Training Authority about apprenticeships and their block training sessions. They also pointed to a lack of assistance for staff required to assist non-case managed apprentices and to provide applicants with information regarding the types of available supports on a regular basis.

The following lessons learned and good practices were reported by key informants that may help British Columbia apprentices complete their training and obtain their certification:

- Having service providers engaged with training institutions helps to increase awareness of up-coming training sessions and the availability of seats.
- Expanding the program application tool to mobile phones and providing additional assistance when required to complete the application.
- Conducting information sessions at the beginning of the application process. This can help to lower the number of inquiries received from non-case managed apprentices and to reduce the burden on case managers.
- Encouraging case managed apprentices to conduct informational interviews with employers to determine the best trade to meet their needs.

2.4 Wage Subsidy Work Experience Placement

2.4.1 Program description

Based on a document review and 8 key informant interviews completed in summer 2015

The Wage Subsidy Work Experience Placement program provides a wage subsidy to eligible employers as an incentive for them to hire and provide work experience and skills enhancement to EI-eligible participants identified as needing work experience.

The duration of the wage subsidy ranges from 12 to 24 weeks, with the average level of subsidy generally covering 50% of the employee's wage. For a person with disabilities or facing multiple barriers to employment, the duration can be up to a maximum of 78 weeks. In addition to the wage subsidy, additional employment-related costs can be funded. These costs included transportation/travel, dependent care, work clothing and/or supplies, and employment-related disability costs. The rate or amount of the subsidy is negotiated on a case-by-case basis.

All key informants interviewed indicated that employers are generally hiring individuals that they would not have otherwise hired without the help of the program. According to three key informants, 75% of participants or higher remain employed with their wage subsidized employer after participation.

2.4.2 Program delivery

Based on a document review and 8 key informant interviews completed in summer 2015

In British Columbia, the Wage Subsidy Work Experience Placement program is delivered through service providers. Case managers meet directly with the active or former EI claimant and the employer to assess eligibility. As explained by key informants, the application process is driven relatively equally by participants and employers:

- The employer-driven application process occurs when an employer contacts a caseworker about the wage subsidy program. Employers apply and submit descriptions of the positions they need to fill in their organization. The employers have to confirm that the position would lead to permanent employment, and that they would not hire anyone for these positions without the subsidy. Employers are provided a letter confirming that they can refer employees to the service provider for assessment. Potential candidates meet with the service provider for an assessment to determine eligibility and fit.
- Conversely, the participant-driven application process is initiated by an active or former EI claimant. The individual contacts a case manager and undergoes a needs assessment. The assessment identifies barriers that the participant may have and determines whether the program is a good fit for them. If it is found to be a good fit, the participant is provided with a self-marketing letter to encourage employers to hire them.

Some service providers also deliver a short course about the program and provide strategies to the participant for discussing the program with employers. Once the participant finds a suitable

employer, the case manager conducts an eligibility assessment for the employer to ensure that the position will likely lead to a permanent job. Also, the employer completes an application form which includes a job description, orientation and training plan suitable for the participant's needs and circumstances.

Regardless of who initiate the process, a training plan is developed for the participant. A wage subsidy agreement is then implemented. The service providers have final approval of the wage subsidy applications. According to key informants, on average, the application process can be completed in one week depending on how quickly the employers and participants assemble the required information.

2.4.3 Profile of Wage Subsidy Work Experience Placement participants

Socio-demographic characteristics

As shown in Table D1 in Appendix D, active claimants who started program participation between 2002 and 2005 were more often male (54%) while more females participated during the 2007-2008 period (56%). The majority of participants in the 2002-2005 cohort were between 25 and 44 years old (58%), while the 2007-2008 participants were more evenly distributed between the 25-34 (26%), 35-44 (26%) and 45-54 (27%) age groups. Participants in both cohorts most frequently held occupations that required secondary or occupational training prior to their program participation (39% and 40% respectively).

Former claimants who participated in the program between 2002 and 2005 were again more often male (56%), while those who started in 2007-2008 were more often female (59%). The majority of both cohorts was composed of individuals aged 25-44 (62% and 59% respectively). Participants in both groups most frequently held jobs that required secondary or occupational training prior to program participation (39% and 38% respectively).

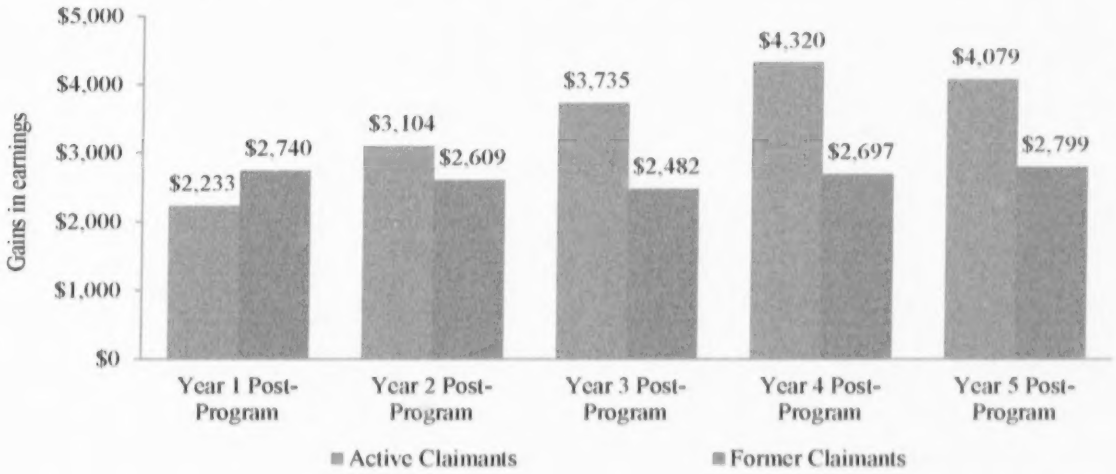
2.4.4 Incremental impacts

Detailed incremental impact results for active and former claimants are presented in Tables D2 and D3 in Appendix D.

Active claimants

Active claimants who started participation in the Wage Subsidy Work Experience Placement program between 2002 and 2005 had incremental gains in earnings and incidence of employment in each of the five years after participation. Annual gains in earnings ranged between $2,233 and $4,320 (see Figure 5), while gains in incidence of employment ranged from 5.1 to 6.3 percentage points annually. Participants decreased the use of EI and social assistance by a cumulative of $465 and $ 441 respectively. Most results for the impact on the level of dependence on income support were non-statistically significant, except for an increase of 1.3 percentage points in the fifth year post-program.

Figure 5. Increased earnings of active and former Wage Subsidy Work Experience Placement participants relative to non-participants



Active claimants who started program participation in 2007 or 2008 experienced similar gains in earnings and incidence of employment over all post-program years. Results pertaining to EI and social assistance use and the level of dependence on income support were non-statistically significant.

Overall, active claimants improved their labour market attachment through increases in earnings and incidence of employment, and decreases in the use of EI and social assistance.

Results for sub-groups showed the following:

- Youth (under 30 years old) who started participation in the program between 2002 and 2005 had incremental gains in earnings in all five years after participation. As well, their incidence of employment increased in the first two post-program years. Results for other indicators were non-statistically significant.
- Older workers (55 years old and over) who participated in 2002-2005 had incremental gains in earnings and incidence of employment in all post-program years. All other results were non-statistically significant.
- Long-tenured workers who started participation between 2007 and 2009 experienced gains in earnings and incidence of employment in each of the three years after participation. Like other sub-groups, most other incremental impacts were non-statistically significant.

Former claimants

As shown in Figure 5, former claimants who started program participation between 2002 and 2005 had incremental gains in annual earnings (ranging between $2,482 and $2,799) and incremental gains in annual incidence of employment (ranging between 4.3 and 5.9 percentage points) over the five years after participation. These participants reduced their use of social assistance in all post-program years, while results for the dependence on income support were

generally non-statistically significant. Former claimants had incremental increases in EI use in the first three years following participation (ranging between $163 and $371 annually), which may reflect an inability by some to maintain the employment secured during or after the subsidy. When interpreting these results, readers should keep in mind that participants collect insurable hours under EI while working in the subsidized job. This may allow them to start claiming EI if they are not able to maintain their subsidized job.

Former claimants who started their wage subsidy intervention in 2007 or 2008 also had incremental gains in their earnings and incidence of employment over the three post-program years. Like 2002-2005 participants, these former claimants increased their EI use and decreased their social assistance use over most of the post-program period. Results for dependence on income support were non-statistically significant.

Overall, former claimants increased their use of EI following participation. This indicates the inability of some former claimants to maintain the employment secured in the short-term. It can also be argued that the increase in EI use is an indication of increase labour market attachment for this client group since they did experience increases in employment earnings and incidence of employment as well as a decrease in the use of social assistance. As a reminder, former claimants are participants for whom the EI benefit period ended up to three years pre-participation

Results for sub-groups of former claimants were as follows:

- Youth who started program participation in the 2002-2005 period had incremental gains in earnings in the first, fourth, and fifth years after participation. In the first year after participation, they also had a gain in incidence of employment, increased EI use, and decreased social assistance use (in the first and second year). The remainder of the results were non-statistically significant.
- Long-tenured workers who started participation between 2007 and 2009 had incremental gains in earnings in all post-program years as well as a gain in the incidence of employment in the first year after participation. These participants also had increased EI use and dependence on income support in the first year post-program. Results for other years, and social assistance use, were non-statistically significant.

Impacts for older workers were not produced as the number of participants was too small.

2.4.5 Cost-benefit results

From the social perspective, the benefits of Wage Subsidy Work Experience Placement for active claimants matched the costs of the program 3.2 years after participation (see Table D4). Six years after participation, the benefits exceeded the costs by $10,802.

The benefits of Wage Subsidy Work Experience Placement for former claimants matched the costs within the first year after participation. By six years post-program, the benefits exceeded the cost by $14,891.

2.4.6 Challenges and lessons learned about Wage Subsidy Work Experience Placement design and delivery

Based on a document review and 8 key informant interviews completed in summer 2015

Despite being effective at improving the labour market experience of participants, there has been a steady decline in the use of the Wage Subsidy Work Experience Placement program in recent years. In British Columbia, the number of new interventions decreased from 3,541 in 2003-2004 to 1,295 in 2014-2015.

Key informants identified the following potential factors influencing the decline in use of the program:

- Inexperienced service providers.
- Administrative burdens on the employers.
- Lack of awareness about the program.

Key informants further reiterated that these factors pose challenges with respect to program design and delivery. They also highlighted a number of lessons learned related to the design and delivery of the Wage Subsidy Work Experience Placement program:

- Engaging with the community and employers through outreach efforts helps market the program.
- Matching participants' skills and employers' needs enhances the retention of participants with employers.
- Ensuring clear and comprehensive communications with employers regarding administrative requirements at the beginning of the process is helpful.

2.5 Self-Employment

2.5.1 Program description and delivery

Self-Employment helps individuals create jobs for themselves by starting a business or otherwise becoming self-employed. It provides financial assistance and business planning advice to EI eligible participants to help them start their own business. This financial assistance is intended to cover personal living expenses and other expenses during the initial stages of the business.

2.5.2 Profile of Self-Employment participants

Socio-demographic characteristics

As shown in Table E1 in Appendix E, active claimants who started participation in the Self-Employment program were nearly evenly split between males and females in the 2002-2005 cohort (51% and 48% respectively) and more likely to be female (60%) in the 2007-2008 cohort. Participants in the 2002-2005 cohort were relatively concentrated within the 35-44 age group (35%), while 2007-2008 participants were more evenly distributed between the 25-34 (30%), 35-44 (28%), and 45-54 (27%) age groups. Participants in both cohorts most frequently had occupations that required college or apprenticeship training prior to participation (36% and 39% respectively), though a notable proportion of participants held a job that required either secondary or occupational training as well (30% and 28% respectively).

Former claimants who participated in Self-Employment in either 2002-2005 or 2007-2008 were more often female (56% and 69% respectively). Participants in the 2002-2005 cohort were relatively concentrated within the 35-44 age group (35%), while 33% of the 2007-2008 participants were between 25 and 34 years old. Prior to participation, former claimants in both the 2002-2005 and 2007-2008 cohorts most frequently held jobs that required either secondary or occupational training (33% and 34%) or college or apprenticeship training (30% and 31%).

2.5.3 Challenges in measuring Self-Employment incremental impacts

Like other EBSMs, incremental impacts were estimated for active and former claimants who participated in Self-Employment in the 2002-2005 and 2007-2008 periods. Results showed large decreases in employment/self-employment earnings and decreases in the incidence of employment. As well, compared to similar non-participants, program participants decreased their use of EI and social assistance and reduced their dependence on government income support.

Detailed estimates are presented in Tables E2 and E3 in Appendix E. However, they are not discussed in the report since they may not provide an accurate depiction of the financial well-being of participants in the post-program period. Impacts were examined using individual earnings reported in the T1 and T4 taxation files from the Canada Revenue Agency, and measured relative to active claimants who did not participate and may have been in any employment or unemployment situation following participation (for example, unemployed, paid employee or self-employed).

According to a study from Statistics Canada, self-employed individuals in Canada have a lower average annual income than paid employees ($46,200 versus $52,400 in 2009), but the average net worth of their households is 2.7 times greater than that of the paid employee households, which indicates that some self-employed individuals may leave funds within their business for reinvestment purposes.[13] Overall, this suggests that looking at individual earnings alone, without taking the net worth into consideration, may not provide a fair assessment of how well Self-Employment participants are doing financially after participation.

As well, little is known about the design and delivery of this program. In particular, there is a lack of understanding around the role played by this program in helping future entrepreneurs implement viable business plans and develop their entrepreneurship skills. Overall, it is not clear whether a participant's success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills or the assistance provided under the Self-Employment program.

[13] Sébastien LaRochelle-Côté and Sharanjit Uppal, "The Financial Well-Being of the Self-Employed," Perspectives on Labour and Income, vol. 23, no. 4, Winter 2011.

2.6 Job Creation Partnerships

2.6.1 Program description

Based on information from British Columbia's Ministry of Social Development and Social Innovation "Work BC" website[14]

Job Creation Partnerships provides funding to organizations to assist with local projects (that would normally not take place without project funding) that provide meaningful work experience and skill enhancement opportunities to unemployed EI-eligible clients to help them obtain sustainable employment. By providing a work experience opportunity, Job Creation Partnership projects will maintain or enhance the participant's employability skills – particularly if the job seeker has been unemployed for a long period of time. This work experience, coupled with the networking opportunity that exists while on such a project, increases the participant's chances of successfully finding sustainable employment.

While projects should benefit the job seeker, community and the local economy, the emphasis of any project must be on a quality work experience for the participant. Program funding cannot be used to supplement an organization's core funding (or create a funding dependency) or replace an organization's staff and/or volunteers, nor can it result in an unfair competitive advantage for a for-profit employer. The project activities must be finite, incremental and distinct (not part of day-to-day operations), and they must be not-for-profit.

2.6.2 Program delivery

Based on information from British Columbia's Ministry of Social Development and Social Innovation "Work BC" website

Job Creation Partnership projects may last up to one year, the duration of which is negotiated between the organization and the Ministry. Organizations may be reimbursed for project-specific overhead costs that were incurred, including (but not limited to): materials and supplies, rental of equipment, orientation costs, administrative wages and capital costs, and other eligible expenses negotiated with program officials. Partnership funding from the applicant organization is required, and it is expected that the applicant or other partners will substantially contribute to project costs.

The following organizations are eligible to apply for program funding:

- Businesses (meeting specific criteria).
- Non-Profit Organizations.
- Crown Corporations.
- Municipalities, Agencies, or Territorial Governments.
- Band/Tribal Councils.
- Public Health and Educational Institutions.

[14] Program information was gathered from factsheets and applications posted on the Job Creation Partnerships page of the Work BC website

Stakeholder partnerships are a necessary component of a successful project. As such, Job Creation Partnerships projects require support from the community and evidence of community consultation must be provided as part of the assessment process.

Eligible participants will be referred to a project by their local WorkBC Employment Services Centre and receive eligible financial (that is, living) supports from that service provider. These centres are responsible for screening and referring clients, as well as case management of clients.

2.6.3 Profile of Job Creation Partnerships participants

Socio-demographic characteristics

As shown in Table F1 in Appendix F, active claimants who participated in Job Creation Partnerships between 2002 and 2005 were closely split between males and females (46% and 53% respectively) while those who started in 2007 or 2008 were mainly female (66%). The majority of participants in the 2002-2005 cohort were between 25 and 44 years old (58%), while 2007-2008 participants were more evenly distributed between the 25-34 (26%), 35-44 (27%) and 45-54 (27%) age groups. Participants in both cohorts most frequently held jobs that required either secondary or occupational training (35% and 32% respectively) or college or apprenticeship training (29% and 33% respectively) prior to participation.

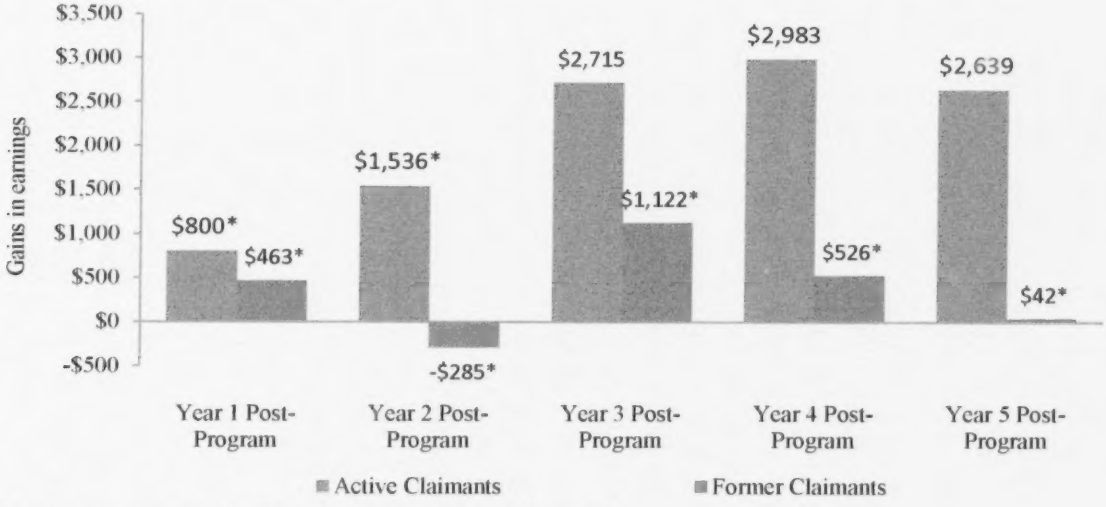
Former claimants who started program participation in 2002-2005 were mainly male (60%) while those in the 2007-2008 cohort were more closely split between males and females (52% and 48% respectively). The 2007-2008 participants were generally older, with the majority (57%) falling into the 35-44 age group compared to the 2002-2005 cohort were 59% of participants were between 25 and 34 years old. Before participation, former claimants in both the 2002-2005 and 2007-2008 cohorts most frequently had an occupation that required secondary school or occupational training (33% and 35% respectively).

2.6.4 Incremental impacts

Active claimants

Shown in Table F2 in Appendix F, active claimants who participated in the Job Creation Partnerships program between 2002 and 2005 had incremental gains in earnings in the third ($2,715), fourth ($2,983) and fifth year ($2,639) post-program (see Figure 6). They also experienced an increase in incidence of employment in the first year after participation (5.3 percentage points), while estimates for the remaining years were non-statistically significant at the 95% level or above. These increases in earnings and incidence of employment were accompanied by increased EI use over most of the post-program period by amounts ranging between $354 and $652 annually. This indicates the inability of some active claimants to maintain the employment secured in the short-term following program participation. All results for social assistance use and most results for dependence on income support were non-statistically significant.

Figure 6. Increased earnings of active and former Job Creation Partnerships participants relative to non-participants



* The estimates are not statistically significant at the 95% confidence level.

Active claimants who started Job Creation Partnerships interventions in 2007 or 2008, as well as sub-groups of active claimants, could not be examined since the number of participants was too small to produce reliable estimates.

Former claimants

Most incremental impact results for former claimants who started Job Creation Partnerships participation between 2002 and 2005 were non-statistically significant. Additionally, results could not be produced for those who started participation in 2007 or 2008, nor for sub-groups of former claimants, because the number of participants was too small to permit reliable statistical analysis. In this context, it is not possible to draw any conclusion about the effectiveness of Job Creation Partnerships for former claimants during these two periods.

2.6.5 Cost-benefit results

From the social perspective, the benefits of Job Creation Partnerships for active claimants would need to persist for 23.6 years after participation in order to match the costs. For former claimants, the benefits may never recover the costs. When interpreting these results, however, readers should acknowledge that program funding helps develop the community and the local economy and that none of these benefits are accounted for in the calculations since they are difficult to quantify.

2.7 Employment Assistances Services

2.7.1 Program description

Based on a document review and 10 key informant interviews completed in summer 2013

Employment Assistance Services programing includes self-serve and case management services.

Self-Serve Services include:

- Awareness and navigation support to clients on available employment resources, supports and services.
- Financial support for eligible non-case managed individuals.
- Staffed self-serve resource areas, including employment resource materials and assistance in job search.
- Information on job opportunities and vacancies.
- Directory of community based services.
- Labour market information to job seekers and employers.
- Self-serve assessment tools (career planning and employability assessments).
- Job search and employment focussed workshops (including topics such as jobs search techniques, cover letters, resume writing, self-marketing, networking, interview techniques).

Service providers are required to help the individual understand how to access the self-serve services as independently as possible.

Case Management involves the services required to assess individual needs, determine employment objectives, and provide employment supports and services towards outcomes. The service providers offer case management for eligible, unemployed individuals when it is determined that he/she is unlikely to achieve employment independently using self-serve services.

Case management activities include:

- Awareness and navigation support such as completing applications, identifying funding and training options, and confirming eligibility for supports, and navigation to other community services or programs.
- Formal Needs Assessment to determine the individual's employment readiness and other unique characteristics, situational factors or practical considerations that may impact employability.
- Multi-dimensional needs assessment as a first step in the Formal Needs Assessment and other assessments as required.
- Determine individual need and eligibility for financial supports to support participation.
- Develop and revise a mutually agreed to return-to-work action plan.
- Support the participant in accessing services identified as needed in the return-to-work action plan.
- Manage the participant's file, provide support and monitor/track progress.
- Follow-up service after the individual has achieved labour market attachment to determine need for additional services and supports.

Specialized assessments are also provided to: help clarify the individual's employment-related capabilities, strengths, and needs; identify supports and goals; and identify considerations that may affect career choice, skills development methods, and employability. All specialized assessments provide employment-related information that supports an informed understanding of the individual employment readiness and employment service needs.

Service providers offer specialized assessments to individuals only where it is identified as necessary through the Formal Needs Assessment. They may provide specialized assessments directly (when the service provider has a qualified assessor) or they may purchase a specialized assessment from another service provider. Some examples of specialized assessments include neurological psychological vocational assessment, vocational psychological assessment, functional capacity assessment, learning disability assessment and ergonomic assessment.

2.7.2 Program delivery

Based on a document review and 10 key informant interviews completed in summer 2013

The Employment Assistance Services program delivers an integrated system of employment services and supports by:

- Building a network of 85 Employment Services Centres operated by 73 service providers.
- Providing services to all eligible participants, including Specialized Populations[15] through every Employment Services Centre across the province.
- Providing an information management and technology system that supports integrated service delivery.

Service providers deliver the program through an Employment Services Centre within their catchment area. All catchments have at least one storefront location that is accessible to the public. Where there is sufficient demand, there may be more than one storefront per catchment area.

Service providers provide alternative means to access the Employment Services Centre for Specialized Populations as appropriate for that catchment area. This may include any combination of the following channels:

- **Satellite offices**: a physical office that is separate from the Storefront and offers a sub-set of the services delivered in the Storefront.
- **Itinerant (mobile) services**: delivery of services on a regularly scheduled basis at a community location with ease of access for the individuals (for example, community centre).
- **Outreach services**: bringing services to individuals at a location other than the Employment Services Centre location.
- **Remote access services**: delivery of services remotely through online, telephone channels, or other innovative means.

[15] Specialized Populations are: people with a disability, immigrants, francophone persons, multi-barriered participants, survivors of violence and/or abuse, Aboriginal people, rural and remote populations and youth.

2.7.3 Profile of Employment Assistance Services participants

Socio-demographic characteristics

The following profile presents the main socio-demographic characteristics of active and former claimants who participated exclusively in Employment Assistance Services without participating in any other Employment Benefits programs.

As shown in Table G1 in Appendix G, active claimants who participated exclusively in Employment Assistance Services between 2002 and 2005 were almost evenly split between male and female (50% and 49% respectively) while those who started in the 2007-2008 period were mainly female (61%). The majority of participants who started their intervention between 2002 and 2005 were between 25 and 44 years old (56%), while the 2007-2008 participants were slightly more distributed between the 25-34 (24%), 35-44 (26%), and 45-54 (26%) age groups. Before participation, active claimants in both cohorts most frequently had an occupation that required secondary school or occupational training (40% and 39% respectively).

Former claimants who participated only in Employment Assistance Services during the 2002-2005 period were also closely split between male (52%) and female (47%) participants, while a greater proportion of the 2007-2008 participants were female (58%). While the majority of participants in both the 2002-2005 and 2007-2008 cohorts were between 25 and 44 years old (59% and 54% respectively), the more recent cohort was slightly older on average with 35% of participants aged 45 and over (compared to 30% of the 2002-2005 cohort). Participants in both cohorts most frequently had jobs that required secondary school or occupational training before participation (40% each).

Labour market barriers faced by Employment Assistance Services participants

Based on a document review and 10 key informant interviews completed in summer 2013

According to key informants, the main labour market barriers experienced by individuals who access Employment Assistance Services in British Columbia are:

- Low skills levels (literacy and essential skills).
- Lack of transferable skills/outdated skills (particularly for long-tenured workers).
- Lack of job searching skills and poor interviewing skills.
- Lack of job maintenance skills.
- Lack of work experience.
- Lack of employment opportunities in general, especially in rural areas.
- Competitive labour market or lower and non-competitive wages in some areas.
- Seasonal employment.
- Criminal records and addictions.
- Mental health issues and having a disability.
- Transportation.
- Childcare.
- Lack of self-confidence, poor personal management skills and poor communication skills.

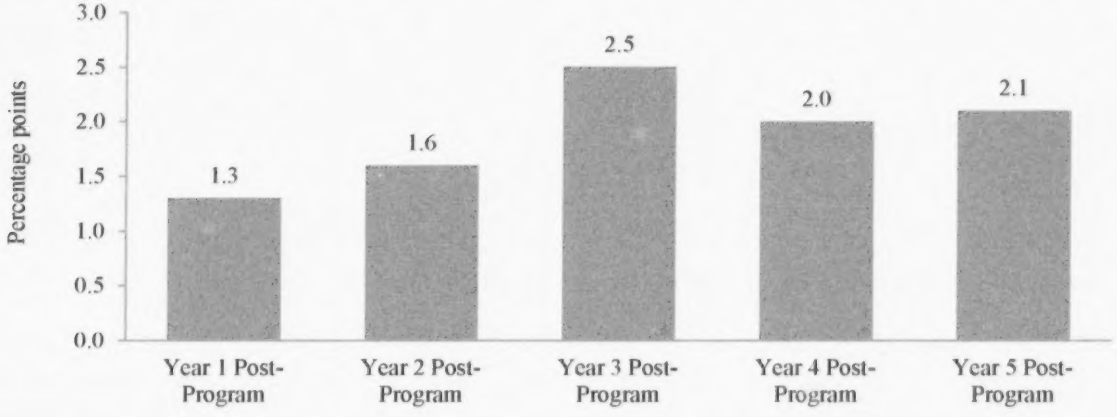
- Immigrants face challenges with the recognition for their credentials and previous work experience. They often take a 'survival' job that does not match their credentials.

2.7.4 Incremental impacts

Incremental impacts were produced only for active claimants, since former claimants who participated only in Employment Assistance Services were used as a comparison group for former claimants who participated in other EBSMs.

Results presented in Table G2 indicate that active claimants who participated exclusively in Employment Assistance Services between 2002 and 2005 had incremental gains in incidence of employment over all five years after program participation, ranging between 1.3 and 2.5 percentage points annually (see Figure 7). Participants also reduced their use of EI in all post-program years by a cumulative of $1,284 or 3.8 weeks. Use of social assistance increased slightly in all post-program years (ranging between $37 and $78 per year) while overall dependence on income support decreased in all years after participation (ranging between 0.1 and 1.2 percentage points annually).

Figure 7. Incidence of employment for active claimant participants in Employment Assistance Services



Participants had an incremental reduction in their employment earnings in the first year after participation (-$1,176), though this was followed by incremental gains in the fourth ($643) and fifth years ($927) post-program. To contextualise these results, it should be noted that Employment Assistance Services are short-term, low intensity measures that are not focused on human capital development. It mostly includes services such as counselling, help with job search, development of return-to-work action plans and (in some cases) very short training such as First Aid. In this context, it may not be reasonable to expect that participating only in Employment Assistance Services would result in improved participant earnings. Rather, the results for incidence of employment and EI use suggest that active claimants are returning into employment after participation.

Active claimants who participated exclusively in Employment Assistance Services in 2007 or 2008 followed similar trends with respect to incremental gains in incidence of employment and

decreases in EI use and dependence on income supports, as well as slightly increased social assistance use. Like the 2002-2005 cohort, these active claimants also had an incremental decrease in earnings in the first post-program year but increases in the following (second and third) post-program years.

Results for sub-groups of active claimants who participated exclusively in Employment Assistance Services were as follows:

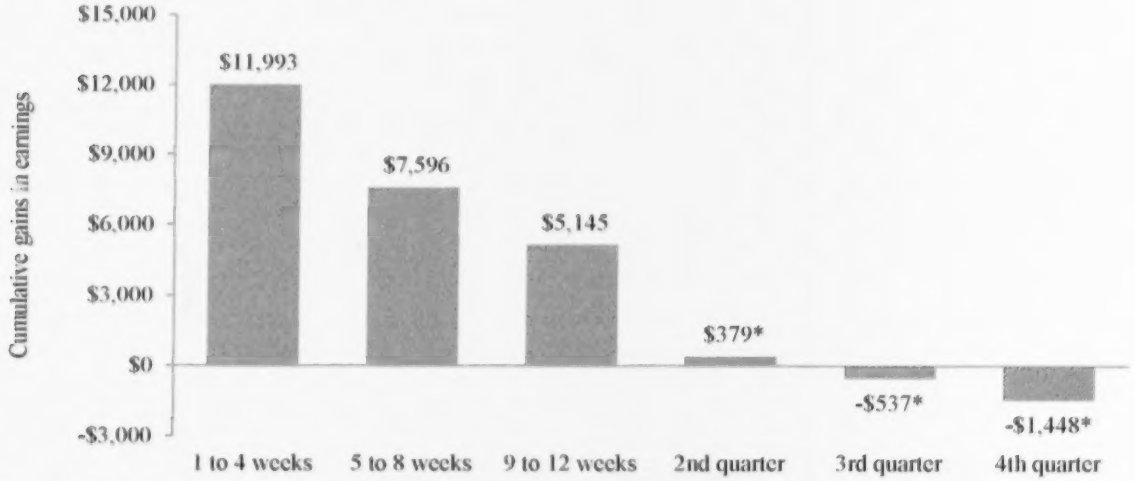
- Youth (under 30 years old) who participated between 2002 and 2005 had incremental gains in their incidence of employment in all years after participation, as well as incremental gains in earnings in most post-program years. They also reduced their use of EI and dependence on income support in the short-term (first three years) following program participation.
- Older workers (55 years old and over) who participated in Employment Assistance Services between 2002 and 2005 also had incremental gains in earnings starting in the second post-program year (following a first-year decrease) and gains in their incidence of employment in all years after program participation. Their use of EI decreased in the short-term (first and second years) and increased in the fifth year following participation, while their dependence on income support showed a decrease in the second year, but then increased in the following three years post-program.
- Long-tenured workers who participated between 2007 and 2009 had gains in incidence of employment and reductions in EI use in all post-program years. They also had an incremental decrease in earnings in the first year after participation but an increase in the third year. As well, their dependence on income support decreased in every post-program year.

Earlier participation in Employment Assistance Services improves participants' labour market outcomes

The study on the effects related to the timing of participation showed that the incremental impacts of program participation on earnings and employment were larger for individuals who participated in Employment Assistance Services early during their EI claim compared to non-participants and to individuals who remained on EI for longer periods before receiving these services (see Figure 8 below and Table G3 in Appendix G). Specifically, individuals who started their participation within four weeks following the start of their EI benefit period had a cumulative gain in earnings of $11,993 over the five post-program years. These early starters also experienced annual gains in their incidence of employment that ranged between 1.2 and 2.1 percentage points over the first four years after participation.

Participants who received Employment Assistance Services between 5 to 8 and 9 to 12 weeks after the start of their EI claim also had gains in earnings totalling $7,596 and $5,145 respectively over the post-program period. Participants who started Employment Assistance Services interventions in the 2nd, 3rd and 4th quarters of their EI benefit period had non-statistically significant cumulative increases/decreases in their employment earnings.

Figure 8. Cumulative incremental impacts on earnings related to the timing of participation in Employment Assistance Services



* The estimates are not statistically significant at the 95% confidence level.

The study also looked at the difference between the number of EI weeks unused by participants and their comparison group to determine the effect of the timing of participation in Employment Assistance Services on the return to employment. It was found that those who received assistance within the first four weeks of their claim returned to employment earlier than the comparison group – specifically, 3.5 weeks earlier (see Table G4 in Appendix G). Participants who started Employment Assistance Services between 5 and 8 weeks from the start of their EI benefit period returned to employment 0.2 week sooner than the comparison group. Participants who started receiving assistance in the 9th week or after returned to employment later than the comparison group.

Among all participants in the 2002-2005 period, 13,380 received assistance within the first 4 weeks of establishing an EI claim. With an average weekly EI benefit of $317 during this period, the 13,380 participants did not use $14,845,110 in EI benefits (13,380 * $317 * 3.5 weeks). The average cost of delivering Employment Assistance Services during the 2002-2005 period was $841. This represents a cost of $11,252,580 (13,380* $841) for a net savings of $3,592,530 in EI benefits.

2.7.5 Cost-benefit results

From the social perspective, the benefits of Employment Assistance Services for active claimants would need to persist over 9.4 years in order to recover the costs of the program (as shown in Table G5 in Appendix G). This result is partly due to the decreases in earnings experienced by active claimants during and immediately after participation. The main expected benefit from Employment Assistance Services is the return to employment by itself and not necessarily improvements in earnings that may follow, as Employment Assistance Services alone do not focus on skills acquisition.

Incremental impact analyses showed that Employment Assistance Services are achieving this objective since it increased participants' incidence of employment and decreased their EI use after participation. The value of the return to employment was not accounted for in this analysis since it is difficult to attribute a dollar figure to this impact. The decrease in EI use was also not considered from the social perspective because it represents a benefit for the government and a cost to the individual – they cancel each other out

2.7.6 Challenges and lessons learned about Employment Assistance Services design and delivery

Based on a document review and 10 key informant interviews completed in summer 2013

Key informants indicated that service providers are expected to use labour market information to support program delivery. In particular, they are expected to:

- Have labour market information products available in the staffed self-serve resource area.
- Be aware of labour market conditions and trends within the local community, and throughout the provincial and national labour markets.
- Be responsible for ensuring that participants understand how to find and use labour market information for job searching, as well as in employment, training and career decision making.
- Provide access to labour market information to employers in order to assist them in hiring, training and retraining workers, and in developing human resource strategies.

While the expectation on service providers is that their provision of labour market information be detailed and comprehensive, they mentioned that available information is limited. In particular, they explained that information on government websites can sometime be outdated. As well, labour market information is not available at the rural level and is limited at the local level.

Service providers interviewed also identified a number of challenges with respect to the delivery and targeting of Employment Assistance Services:

- There is a need to raise awareness of the program among EI and income support claimants.
- There is an administrative burden associated with the new data collection system. As well, the requirement for bi-weekly follow-up with participants is seen as a burden.
- Available funding does not allow for the provision of one-on-one support in the self-service area. As well, not all service providers can afford a specialist for the specialized groups that they are mandated to serve.
- Eligibility requirements are seen as being strict.
- Some service providers cover a large rural area and this poses some challenges, such as having to drive long distances in order to meet with participants.
- There are regions with no cell phone and internet services.
- Participants with multiple barriers to employment often require multiple referrals. Service providers are generally unable to track participants through multiple referrals and lose touch with these individuals.

Key informants also identified the following best practices and lessons learned in relation to the design and delivery of the program:

- The importance for service providers to be engaged at the community level and to have strong employer connections.
- Build cooperation between case managers across the province, including the creation of working groups composed of service providers and provincial staff to discuss ongoing issues.
- Have flexibility in program guidelines in order to accommodate the needs of participants in rural area.
- Conduct appropriate needs assessment and provide career orientation.
- Group workshops work well. Organizations are able to reach more people and establish first connection.
- Provide more flexibility in financial support, particularly when a job is found by/for a participant.
- The importance of providing one point of service when possible in order to minimize the referral process from one organization to another.
- Provide free job posting for employers on the service providers' internet site.
- The importance of networking with community organizations including other service providers and particularly those dealing with persons with disabilities and mental health issues.
- Adopt a cooperative approach for service delivery by working closely with other service providers.
- Have adequate staff capable of providing the various required services.

Additional lessons learned and best practices with respect to helping participants with multiple barriers to employment were identified by key informants, including:

- Provide participants with a comfortable environment and focus on building their self-esteem.
- Provide one-on-one support with a holistic and flexible service approach.
- Provide participants with employability skills, life skills and help with how to deal with change.
- Provide specialized workshops and unpaid work experience.
- Conduct appropriate needs assessment and provide career orientation.
- Help participants in dealing with addictions.
- Develop an action plan with a long-term perspective.
- Have contracts in place for specialized participant groups in British Columbia, considering the fact that they are generally faced with unique challenges. It is important to provide one point of service and to minimize the referral process of participants from one organization to another. As well, making appropriate referrals for participants is critical.
- Have dedicated team members for assisting participants with multiple barriers to employment that are capable of building a relationship of trust with these participants.

3. Comparison of key findings by program type

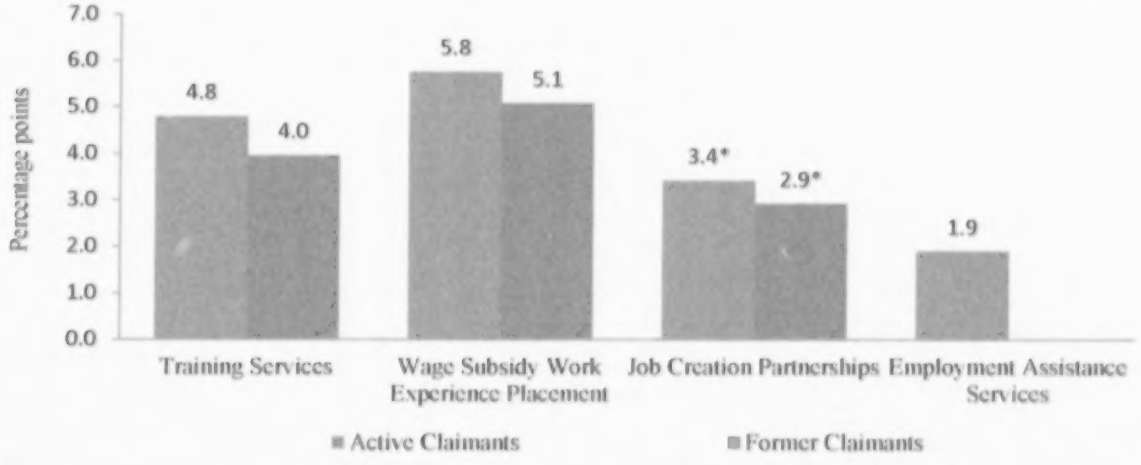
This section provides an overview of the key findings from the incremental impact analysis for Training Services, Wage Subsidy Work Experience Placement, Job Creation Partnerships and Employment Assistance Services for both active and former EI claimant participants who started participation in the 2002-2005 period.

Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of participants, including youth and older workers. As well, social benefits of participation exceeded the cost of investments for most interventions over time. Finally, providing Employment Assistance Services interventions earlier during an EI claim (first four weeks) produced larger impacts on earnings and employment and facilitated earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Program participants have a higher probability of being employed than comparison group members

As shown in Figure 9, active EI claimants who participated in Training Services, Wage Subsidy Work Experience Placement, Job Creation Partnerships and Employment Assistance Services had higher probability of being employed (that is, increased their incidence of employment) compared to similar non-participants. As well, former EI claimants who participated in Training Services and Wage Subsidy Work Experience Placement had a higher probability of being employed compared to former EI claimants who received low intensity interventions under Employment Assistance Services.

Figure 9. Change in probability of being employed in participants relative to non-participants



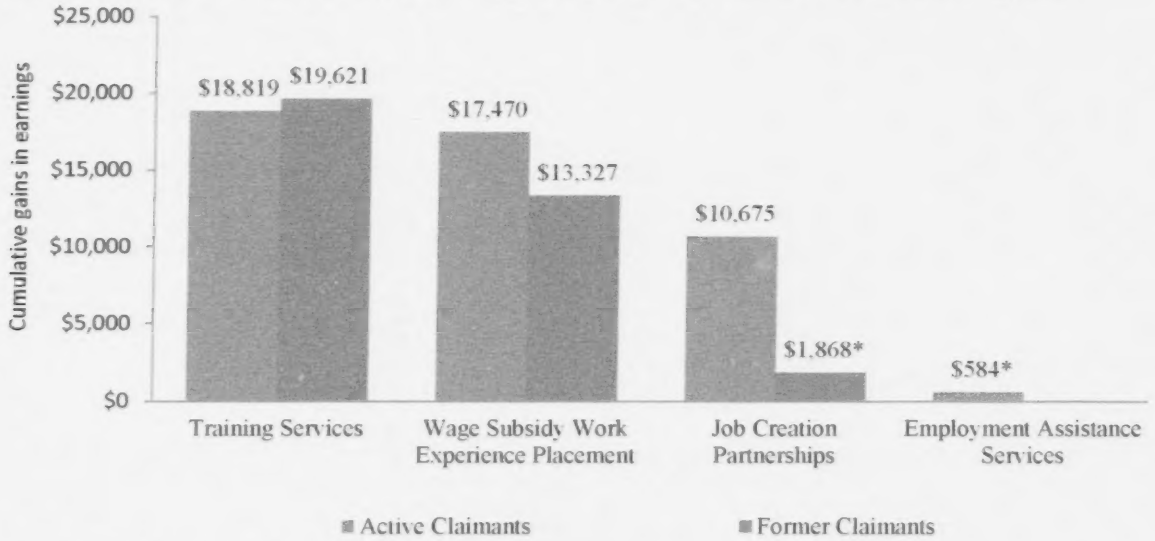
* The estimates in Figure 9 are arithmetic averages. The estimates for active and former claimants who participated in Job Creation Partnerships are based on five estimates with different statistical significance levels. For active claimants, one estimate is statistically significant at the 95% confidence level, three estimates are statistically significant at the 90% confidence level and one estimate is non-statistically significant. For former claimants, one estimate is statistically significant at the 90% level and four estimates are non-statistically significant.

Increased earnings for participants compared to comparison group members

As shown in Figure 10, active EI claimants who participated in Training Services, Wage Subsidy Work Experience Placement and Job Creation Partnerships increased their employment earnings compared to similar non-participants. Former EI claimants who participated in Training Services, Wage Subsidy Work Experience Placement and Job Creation Partnerships also increased their employment earnings compared to former EI claimants who received Employment Assistance Services exclusively.

Employment Assistance Services are relatively modest activities and, by themselves, are not expected to lead to substantial effects on labour market outcomes. In other words, these services aim to support the return to work of unemployed participants and not necessarily to secure a better paying job than pre-participation. However, as demonstrated in the report, providing Employment Assistance Services earlier during the EI claim (first 4 weeks) generates significantly greater returns (see Figure 8 in sub-section 2.7.4).

Figure 10. Increased cumulative earnings of participants relative to non-participants



* The estimates are not statistically significant at the 95% confidence level.

LMDA are also improving the probability of employment and the earnings of youth and active claimant older worker participants

Incremental impacts demonstrate that active EI claimants who were youth and older workers, and who participated in Training Services, Wage Subsidy Work Experience Placement and Employment Assistance Services increased the probability of being employed compared to comparison group members. Youth who participated in Wage Subsidy Work Experience program experienced gains in incidence of employment in the first two years post-program. Older worker participants who were active claimants experienced consistently higher impact on the incidence of employment than active claimant youth participants.

As depicted in Figures 11 and 12, incremental impacts also demonstrate that active claimant youth and older workers who participated in Training Services, Wage Subsidy Work Experience Placement and Employment Assistance Services increased their employment earnings compared to comparison group members. In particular, participation in Training Services and Wage Subsidy Work Experience Placement each yielded strong earnings gains for both youth and older worker active claimant participants.

Former claimants who were youth and who participated in Training Services and Wage Subsidy Work Experience Placement also had increased earnings (see Figure 11).

Figure 11. Cumulative increase in employment earnings for youth participants relative to non-participants youth

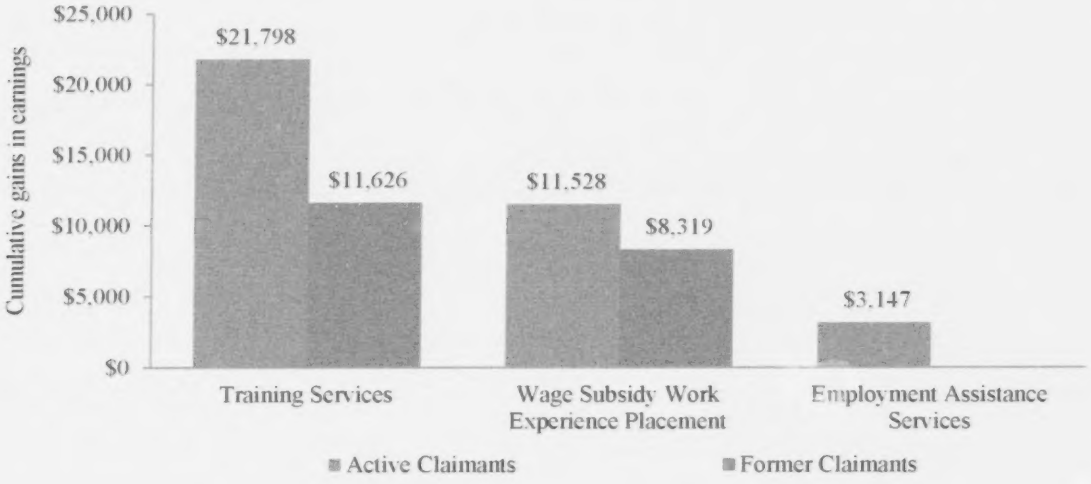
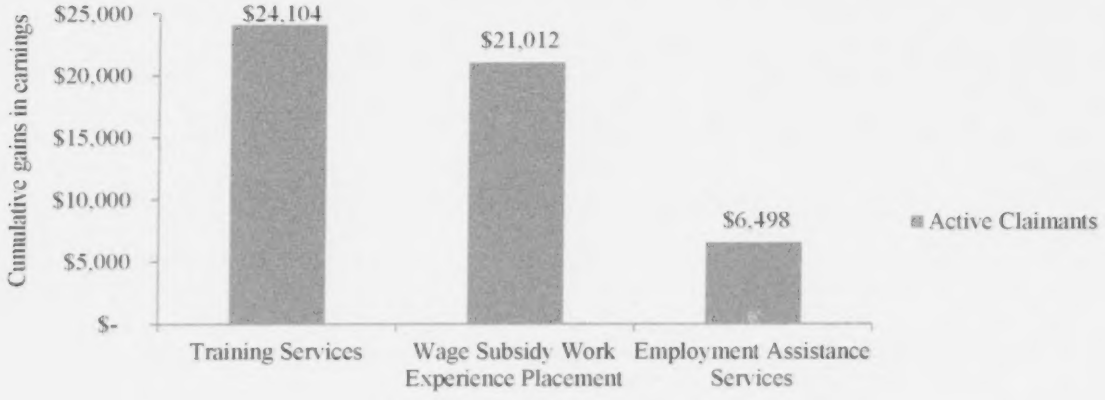


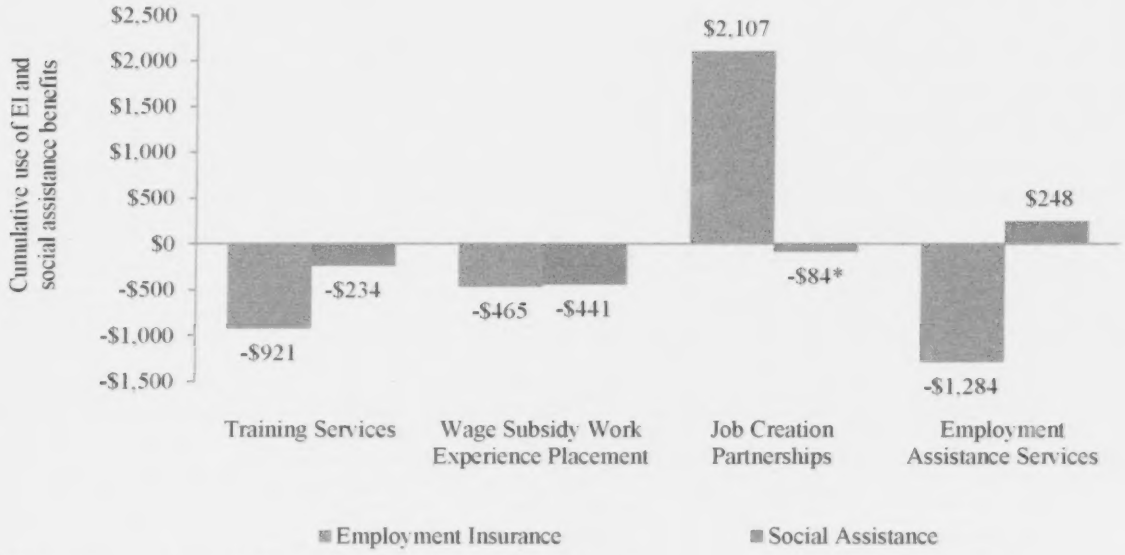
Figure 12. Cumulative increase in employment earnings for older workers participants relative to non-participants older workers



The use of EI is reduced for most active claimants. While EI use increased for former claimants, it can be argued that this reflects an increase in labour market attachment since the incremental impacts on employment earnings and incidence of employment are positive and given the decrease in the use of social assistance for most former claimants.

As shown in Figure 13, active EI claimants who participated in Training Services, Wage Subsidy Work Experience Placement and Employment Assistance Services decreased their use of EI compared to similar non-participants. Active claimants who participated in Job Creation Partnerships increased EI use but they represent nearly 1% of total active claimants' participants in 2002-2005. Active claimants decreased their use of social assistance benefits with the exception of participants in Job Creation Partnerships (non-statistically significant) and Employment Assistance Services (who experienced an increase in social assistance use after participation). As previously stated, the relatively modest activities provided under Employment Assistance Services are not expected to lead to substantial effects on participants' labour market outcomes.

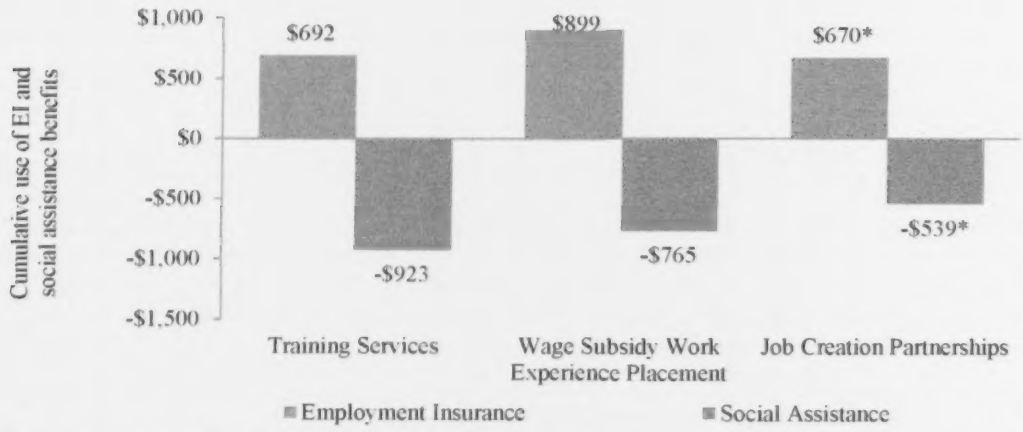
Figure 13. Change in the cumulative use of Employment Insurance and social assistance for active claimants relative to non-participants



* The estimate is not statistically significant at the 95% confidence level.

As shown in Figure 14, former claimants who participated in Training Services and Wage Subsidy Work Experience Placement between 2002 and 2005 increased their use of EI following program participation. This indicates the inability of some former claimants to maintain the employment secured in the short-term. Again, it can also be argued that the increase in EI use is an indication of increase labour market attachment for this client group since they did experience increases in employment earnings and incidence of employment as well as a decrease in the use of social assistance. As a reminder, former claimants are participants for whom the EI benefit period ended up to three years pre-participation.

Figure 14. Change in the cumulative use of Employment Insurance and social assistance for former claimants relative to non-participants



* The estimates are not statistically significant at the 95% confidence level.

Social benefits of participation exceeded costs of investments for most interventions.

As shown in Table 2, social benefits to participation exceeded investment costs in a period ranging from less than a year after program participation to about 10 years after participation for most interventions. This excludes those active and former claimants who participated in Job Creation Partnerships, for whom the investment costs are not likely to be recouped before 23.6 years for active claimants, and may never be recouped for former claimants. However, this group represented only 0.2% of new EBSM interventions in 2014-2015. As well, when interpreting these results the reader should acknowledge that program funding helps develop the community and the local economy, and that none of these benefits are accounted for in the calculations since they are difficult to quantify.

Table 2. Number of years for the benefits to exceed program costs

	Training Services	Wage Subsidy Work Experience Placement	Job Creation Partnerships	Employment Assistance Services
Active Claimants	6.7	3.2	23.6	9.4
Former Claimants	4.8	0.1	Benefits may never recover the costs	N/A

4. Conclusion

The evaluation evidence presented and discussed in this report demonstrates that programs and services designed and delivered by British Columbia under the LMDA are generally helping participants to improve their labour market experience after participation. As such, evaluation evidence suggests that LMDA-funded programming contributes to achieving British Columbia's strategic priorities.

Overall, incremental impacts demonstrate that LMDA programs and services are improving the labour market attachment of active and former EI claimant participants, including youth and older workers who were active claimant participants. As well, social benefits of participation exceeded the cost of investments for all examined interventions over time. Finally, providing Employment Assistance Services interventions earlier during an EI claim (first four weeks) produced larger impacts on earnings and employment and facilitated earlier return to work. This demonstrates the importance of targeting early participation of EI active claimants.

Key informants interviews with service providers and program managers, as well as the documents reviewed and the questionnaires filled by British Columbia representatives, also revealed specific challenges and lessons learned about program design and delivery. Key challenges are highlighted below.

Training Services

- Key informants confirmed that Training Services participants are conducting labour market research as part of the application process to ensure a direct link between their requested training and in-demand occupations. This may contribute to program effectiveness.

- According to service providers and managers interviewed as part of the evaluation, the main challenges and lessons learned about Training Services design and delivery included:
  - An uneven level of experience among caseworkers requiring more time and expertise to understand the nuances of the program.
  - The remoteness and more-limited availability of training institutions in rural and remote areas poses challenges to caseworkers.
  - The limits on the financial supports are perceived as being too low.
  - The paperwork associated with the program's application process can be overwhelming for some participants.

Apprentices

- Existing literature showed that there is a fairly high non-completion rate among apprentices in Canada (40-50%).[16] Furthermore, literature revealed that despite the growth in apprenticeship registrations in Canada, there has not been a corresponding increase in completions.[17] While program data does not provide reliable information on completion and non-completion rates of participants, key informants interviewed in the evaluation noted a high non-completion rate

[16] Red Seal. 2014. Apprenticeship Completion, Certification and Outcomes. Ottawa: Red Seal.
[17] Patrick Coe. 2013. "Apprenticeship programme requirements and apprenticeship completion rates in Canada." Journal of Vocational Education and Training. 65(4): 575–605.

among apprentices in British Columbia and identified reasons that could lead them to drop out of the apprenticeship process. These included:

- EI benefits payments may not be sufficient for apprentices while in training.
- Apprentices and employers do not know what supports are available or where they must go to apply for the program.
- Apprentices may not have the necessary essential skills to perform the required work. They may require greater supports and resources as trades are becoming more complex and sophisticated.
- It can be difficult for apprentices to find the time to return to school to complete their training.
- Some training requires the apprentice to relocate to another community and this may be challenging for them.
- Tuition is not an eligible cost and this is a challenge for many apprentices.
- Due to changes in the economy, some apprentices may switch jobs temporarily. This may impact their ability to complete their apprenticeship. As well, some apprentices are taking other employment opportunities outside of their trade.
- Because of the strict apprentice-journeyman ratios, there are not enough journeymen to supervise the apprentices.

Wage Subsidy Work Experience Placement

- Key informants confirmed that participation in the Wage Subsidy program can be driven by either unemployed individuals or employers looking to fill a new position, and that the subsidized employers are generally hiring those they would not have otherwise hired without the help of the program.

- While evaluation results have demonstrated the effectiveness of the Wage Subsidy Work Experience Placement program, its use has been falling in recent years. According to the EI Monitoring and Assessment Reports, the number of new program interventions decreased from 3,541 to 1,295 between 2003-2004 and 2014-2015. Key informants identified the following possible factors influencing this decline:
  - Inexperienced service providers.
  - Administrative/reporting burdens on the employers.
  - Lack of awareness about the program.

Employment Assistance Services

- Key informants indicated that service providers are expected to use labour market information to support program delivery. However, they also mentioned that available labour market information is limited. They explained that information on government websites can sometimes be outdated. As well, labour market information is not available at the rural level and is limited at the local level.

- According to key informants, other challenges with respect to the delivery and targeting of Employment Assistance Services included:

- Lack of awareness of the program among EI and income support claimants.
- Administrative burden associated with the new data collection system and bi-weekly follow-up with participants.
- Available funding does not allow for the provision of one-on-one support in the self-service area. As well, not all service providers can afford a specialist for the specialized groups they are mandated to serve.
- Eligibility requirements are seen as being strict.
- Some service providers cover a large rural area and this poses some challenges. In some cases, staff need to drive for two hours in order to meet with participants.
- Participants with multiple barriers to employment often require multiple referrals. Service providers are generally unable to track participants through multiple referrals and lose touch with these individuals.

5. Recommendations

A total of six recommendations emerged from the evaluation findings. They are as follows:

- The study on the timing of Employment Assistance Services participation showed that receiving assistance early after starting an Employment Insurance claim can lead to better labour market impacts. However, key informants reported a lack of awareness about the program.
  - Recommendation 1: Consideration should be given to providing British Columbia with timely access to data on new EI recipients for supporting targeting and increasing awareness.

- Incremental impact results showed improvements in participants' earnings and employment for the Wage Subsidy Work Experience Placement program although its use has been declining in recent years. According to key informants, the decline may be related to factors such as a lack of awareness about the program and the administrative burden on employers.
  - Recommendation 2: British Columbia should explore ways of removing barriers to employer participation in the Wage Subsidy Work Experience Placement program.

- Key informants interviewed in the evaluation confirmed the necessity of having labour market information to support the delivery of Employment Assistance Services. They, however, pointed to the difficulty of accessing and using labour market information, especially at the local level.
  - Recommendation 3: Consideration should be given to enhancing the capacity of service providers to access and produce, when needed, relevant labour market information.

- The evaluation was not able to produce a conclusive assessment of Self-Employment effectiveness and efficiency since the data used to assess impacts on earnings may not be the best source of information available to reflect the financial wellbeing of the participants. As well, it is not clear whether participants' success in improving their labour market attachment through self-employment is more closely associated with their business idea and their entrepreneurship skills or the assistance provided under Self-Employment.
  - Recommendation 4: Consideration should be given to examining in more detail the design and delivery of Self-Employment and whether the performance indicators for this program are appropriate.

- Job Creation Partnerships is provided to a small number of participants and was found to be effective at improving the earnings of active claimants but it increased their use of EI. The program was not effective for former claimants. However, the evaluation has not yet examined the design and delivery of this program. Therefore, a lot remains unknown about how this program operates and the factors that contribute to its effectiveness.
  - Recommendation 5: Consideration should be given to examine the design and delivery of Job Creation Partnerships in order to better understand how this program operates.

- Overall, the LMDA evaluation was able to produce a sound assessment of EBSM effectiveness and efficiency because the team had access to rich data on EI claimants, EBSM participation data and Canada Revenue Agency taxation files. However, some data gaps limited the evaluation's ability to assess how EBSMs operate.
  - Recommendation 6: Improvements in the data collection process are recommended to address key program and policy questions of interest to the federal and provincial/territorial governments. Specifically:
    - Collect data on whether participants are members of designated groups including Indigenous peoples, persons with disabilities and recent immigrants.
    - Collect data on the type of training funded under Training Services and the type of assistance provided under Employment Assistance Services. British Columbia, ESDC and other P/Ts should work together to define common categories for both EBSMs.

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Acronyms

EBSM	Employment Benefits and Support Measures
EI	Employment Insurance
ESDC	Employment and Social Development Canada
LMDA	Labour Market Development Agreements
P/Ts	Provinces and Territories

Appendix A - Methodology

Qualitative data

Qualitative data reported in the Training Services, Apprentices, Wage Subsidy Work Experience Placement and Employment Assistance Services studies were collected from key informant interviews with managers and service providers and a document/ literature review. As well, questionnaires were completed by provincial government representatives for the Training Services, Apprentices and Wage Subsidy Work Experience Placement studies. Table A1 provides the number of key informants interviewed.

Key informant interviews for the Employment Assistance Services study were conducted in 2013 while those for the Training Services, Apprentices and Wage Subsidy Work Experience Placement studies were conducted in 2015.

Table A1. Number of key informants interviewed

	Studies			
	Training Services	**Apprentices**	**Wage Subsidy Work Experience**	**Employment Assistance Services**
Number of key informant interviews				
Managers	4	4	8	3
Service providers	7	6		7

Quantitative methods

All quantitative analyses were conducted using linked administrative data from EI Part I (EI claim), EI Part II (EBSM participation data) and T1 and T4 taxation files on up to 100% of participants in British Columbia.

Incremental impacts

The incremental impact analysis compared the labour market experience of participants before and after their participation with that of a comparison group. The goal was to determine the direct effect of program participation on key labour market indicators (see Figure 1 in the introduction section).

For active claimants, incremental impacts were measured relative to a comparison group of active claimants who could have participated in the EBSMs but did not. Former claimants can be underemployed and unable to requalify for EI, out of the labour force for various reasons or on social assistance. Based on previous evaluation methodologies, on expert advice and given the difficulty in generating a suitable comparison for former claimants using administrative data alone, the comparison group for former claimants was created using individuals who participated in low-intensity Employment Assistance Services only during the reference period. This is a conservative approach given the fact that participation in Employment Assistance Services can lead to limited effects on labour market outcomes.

Participants and non-participants were matched based on a wide array of variables including age, sex, location, skill level required by the last occupation held prior to participation, reason for separation from employment, industry in which they were previously employed as well as employment earnings and use of EI and social assistance for each of the five years before participation.

All analyses were conducted using a unit of analysis called the Action Plan Equivalent, which combines all EBSMs given to an individual within no more than six months of each other. For reporting purposes, incremental impacts were attributed to the longest intervention of the Action Plan Equivalent when Training Services, Wage Subsidy Work Experience Placement, Job Creation Partnerships or Self-Employment was the longest intervention. Impacts for Employment Assistance Services were calculated for Action Plan Equivalents that contained only Employment Assistance Services with no other Employment Benefits.

The incremental impact estimates were produced using non-experimental methods - namely propensity score matching using the Kernel Matching method, along with Difference-in-Differences method to estimate program impacts. Alternative matching techniques (specifically, Nearest Neighbour and Inverse Propensity Weighting) were also used for validation purposes.

Incremental impacts were measured for the following indicators:

- Employment/self-employment earnings: represent the total earnings an individual had from paid employment and/or self-employment (this information is available by calendar year and is obtained from T1 and T4 tax return records).
- Incidence of employment/self-employment: represents the incidence of having earnings from employment and/or self-employment.
- Amount of EI benefits: represents the average amount of EI benefits received.
- Weeks in receipt of EI benefits: represents the average number of weeks during which EI benefits were received.
- Social assistance benefits: represents the average amount of social assistance benefits received (this information is available by calendar year and is obtained from T1 tax return records).
- Dependence on income support: represents the ratio of participants' income that came from EI and social assistance benefits (that is, EI benefits + social assistance benefits / (EI benefits + social assistance benefits + earnings from employment/self/employment)).

Incremental impacts were estimated for different cohorts of participants:

- All active and all former claimants, as well as youth (under 30 years old) and older workers (55 years old and over) who started their EBSM participation between April 1, 2002 and March 31, 2005.
- All active and all former claimants who stated their EBSM participation between January 1, 2007 and March 31, 2008.

- Active and former claimants who were long-tenured workers and who started their EBSM participation between January 1, 2007 and December 31, 2009. The long-tenured workers covered in this study are individuals who have established an EI regular or fishing benefit claim, had paid at least 30% of the annual maximum employee EI premiums in seven of the ten years preceding their EI claim, and who had collected 35 or fewer weeks of EI regular or fishing benefits in the five years preceding their claim. This definition is similar to the EI claimant category "long-tenured workers" introduced under Connecting Canadians with Available Jobs.

Cost-benefit analysis

The cost-benefit analysis compared how much it cost for individuals to participate in the programs and how much it costs the government to deliver those programs with the benefits both the participants and the government drew from those programs. The analysis was carried out from the societal perspective, which combines the costs and the benefits for both the participants and government.

Costs and benefits included in the calculations were as follows:

- Program costs included the administration cost and the direct cost of the EBSMs. The cost for each EBSM was calculated at the Action Plan Equivalent level. The costs were determined based on the average composition of the Action Plan Equivalent.
- The Marginal Social Cost of Public Funds represented the loss incurred by society when raising additional revenues such as taxes to fund government spending. The value was estimated as 20% of the program cost, sales taxes, income taxes, impacts on EI and impacts on social assistance paid or collected by the government.
- Employment earnings consisted of incremental impacts on participants' earnings during and after participation. The calculation accounts for the participant's foregone earnings during participation (in other words, opportunity cost). These are based on incremental impacts for the 2002-2005 participants.
- Fringe benefits included benefits such as employer-paid health and life insurance as well as pension contributions. The rate used to calculate the fringe benefits was 15% of the incremental impact on earnings.

The program effects on EI and social assistance use, and the sale and income tax revenues were not included in the calculations since these costs and benefits cancel each other out from the social perspective by definition. For example, while EI and social assistance are benefits received by participants, they represent a cost for the government. However, as indicated above, these effects are accounted for in the calculation of the Marginal Social Cost of Public Funds.

When producing the results, to bring all costs and benefits to a common base and to account for inflation and interest on foregone government investment, the estimates for the second year of participation and up to the sixth year post-program were discounted by 5% per year. As well, when the benefits were still lower than the costs six years after program end, the payback period was calculated by assuming that the average benefit or cost measured over the fifth and six year post-program would persist over time (discounted at a 5% annual rate).

Strengths and limitations from the studies

Overall, the number of key informants interviewed was relatively small in some studies. The key informants' responses were representative of their own experience and their own region but it is unclear if they were fully representative of the entire province.

The matching process led to the creation of comparison groups closely matched to the LMDA participants in terms of their background characteristics. Results obtained with Kernel Matching were validated with the use of two other techniques (specifically, Inverse Propensity Weighting and Nearest Neighbour), increasing the level of confidence in the results. However, readers should be aware that incremental impacts may be affected by factors not captured by the matching process. For example, the motivation to seek employment was not directly measured except to the extent it was captured in prior income and labour market attachment patterns.

Readers should also keep in mind that it is not possible to compare the results obtained for each claimant type since the results for active claimants represent the effects of the EBSMs relative to non-participation while the results for former claimants represents the impact of Employment Benefits relative to a limited treatment (in other words, those who participated exclusively in Employment Assistance Services).

The definition of long-tenured workers used in this report differs from the definition used in the literature as it does not consider the number of years the worker remained employed with the same employer.

The cost-benefit analysis was limited in the sense that it only took into account the quantifiable benefits and costs that were directly linked to EBSM delivery and participation and that could be estimated using available administrative data and the EI Monitoring and Assessment Report. The analysis did not capture "intangible", non-pecuniary and indirect benefits. It did not consider the multiplier effect that improving participants' income may have on the economy and did not account for the effect of EI Part II investment on sustaining a service delivery infrastructure and creating jobs among the governmental program service providers. As well, this analysis did not consider the displacement effects where participants may take away jobs that would otherwise be filled by other unemployed individuals. Finally, this analysis did not consider the possible effect of EBSMs on increasing skill prices.

Appendix B - Detailed results Training Services

Table B1. Socio-demographic and labour market characteristics of Training Services participants

	Active Claimants		Former Claimants	
	2002-2005	2007-2008	2002-2005	2007-2008
Number of observations	11,064	4,090	4,099	1,559
Gender				
Male	46%	38%	43%	34%
Female	53%	62%	55%	66%
Missing	1%	0%	1%	0%
Age				
Under 25	15%	15%	11%	13%
25-34	30%	29%	32%	33%
35-44	30%	29%	33%	31%
45-54	20%	21%	20%	18%
55 and over	5%	6%	5%	4%
Socio-demographic group				
Aboriginal individual*	4%	6%	6%	9%
Person with disability*	6%	7%	9%	8%
Visible minority*	11%	10%	13%	13%
Immigrant	14%	15%	17%	22%
Marital status				
Married or common-law	42%	42%	38%	43%
Widow / divorced or separated	16%	15%	17%	15%
Single	40%	42%	41%	39%
Missing data / unknown	1%	2%	4%	3%
Skills level related to National Occupation Code associated with the last EI claim opened before Training Services participation[1]				
Managerial	5%	6%	4%	5%
University	6%	3%	7%	4%
College or apprenticeship training	27%	25%	25%	25%
Secondary or occupational training	41%	40%	42%	40%
On-the-job training	22%	25%	22%	26%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$21,890	$24,286[3]	$8,909	$10,497[3]
Proportion employed	98%	99%	76%	81%
Proportion on EI	46%	44%	64%	68%
Proportion on Social Assistance (SA)	9%	3%	21%	12%

Proportions may not add up to 100% due to rounding.

*Status self-reported by participant.

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level).
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2007-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table B2. Incremental impacts for Training Services – active claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ALL ACTIVE CLAIMANTS									
2002-2005 participants (n=8,850 or a random sample of 80% of participants)									
Employment earnings ($)	-5,883***	-4,994***	1,042***	3,320***	4,099***	5,145***	5,213***	18,819***	7,941***
Incidence of employment (percentage points)	-5.7***	-3.3***	4***	5.1***	4.9***	5.5***	4.5***	N/a	N/a
EI benefits ($)	2,468***	874***	-479***	-222***	-117***	-94*	-8	-921***	2,421***
EI weeks (weeks)	7.6***	2.6***	-1.6***	-0.7***	-0.3**	-0.3**	-0.1	-3.1***	7.1***
SA benefits ($)	11	-9	-22	-41*	-39*	-60**	-73***	-234**	-233*
Dependence on income support (percentage points)	18.1***	10.5***	-2.7***	-1.4***	-0.8***	-0.9***	-0.5***	N/a	N/a
2007-2008 participants (n=4,090)									
Employment earnings ($)	-6,175***	-4,422***	2,560***	5,559***	6,395***	N/a	N/a	14,471***	3,882**
Incidence of employment (percentage points)	-2.8***	-1.3*	5.8***	7.2***	6.9***	N/a	N/a	N/a	N/a
EI benefits ($)	2,034***	-260***	-768***	-448***	-173**	N/a	N/a	-1,389***	385
EI weeks (weeks)	5.3***	-1.3***	-2.3***	-1.3***	-0.5***	N/a	N/a	-4.1***	-0.1
SA benefits ($)	-65***	-73***	-121***	-121***	-120***	N/a	N/a	-362***	-500***
Dependence on income support (percentage points)	14.7***	2.2***	-5.9***	-5.1***	-3.6***	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS									
Youth (under 30 years old) – 2002-2005 participants (n=3,294)									
Employment earnings ($)	-4,104***	-3,956***	1,762***	3,944***	4,751***	5,488***	5,853***	21,798***	13,738***
Incidence of employment (percentage points)	-4.2***	-2.3***	4***	3.5***	4.1***	3.5***	1.9***	N/a	N/a
EI benefits ($)	1,979***	825***	-461***	-227***	-44	65	30	-637***	2,167***
EI weeks (weeks)	6.6***	2.7***	-1.6***	-0.7***	-0.2	0.1	0	-2.4***	7***
SA benefits ($)	-3	-53**	-65**	-77***	-59**	-82***	-118***	-401***	-456***
Dependence on income support (percentage points)	15.3***	9.2***	-2.8***	-1.2***	-0.8***	0.1***	-0.4***	N/a	N/a
Older workers (55 years old and over) – 2002-2005 participants (n=562)									
Employment earnings ($)	-5,897***	-2,639***	2,610***	5,314***	5,260***	5,652***	5,269***	24,104***	15,568***
Incidence of employment (percentage points)	-3.6**	1.2	10.2***	13.7***	12.4***	13.6***	12.8***	N/a	N/a
EI benefits ($)	3,194***	418**	-252*	-27	307**	360**	798***	1,186**	4,798***
EI weeks (weeks)	9.2***	0.9	-1.2***	-0.2	0.8*	0.8*	1.9***	2.1	12.1***
SA benefits ($)	-38	120*	163**	108	104	141**	73	589*	670*
Dependence on income support (percentage points)	18.6***	5.5***	-1.1	0.5	1.4	4	5.7***	N/a	N/a
Long-tenured workers – 2007-2009 participants (n=2,829)									
Employment earnings ($)	-8,526***	-7,621***	-217	3,084***	4,101***	N/a	N/a	6,967***	-9,181***
Incidence of employment (percentage points)	-1.6**	-1.9**	4.0***	6.2***	6.6***	N/a	N/a	N/a	N/a
EI benefits ($)	3,352***	1,521***	-160*	-141*	21	N/a	N/a	-280	4,592***
EI weeks (weeks)	7.5***	3.1***	-0.6***	-0.5**	0.0	N/a	N/a	-1.1**	9.5***
SA benefits ($)	3	2	-6	-30	-28	N/a	N/a	-64	-59
Dependence on income support (percentage points)	15.7***	8.6***	-2.0***	-2.4***	-0.8	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table B3. Incremental impacts for Training Services – former claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
All Former Claimants									
2002-2005 participants (n=4,099)									
Employment earnings ($)	-2,965***	-2,280***	2,052***	3,509***	4,093***	4,738***	5,229***	19,621***	14,376***
Incidence of employment (percentage points)	-13.8***	-3.6***	3.8***	4.7***	3.8***	3.5***	4***	N/a	N/a
EI benefits ($)	514***	-97**	-137***	176***	249***	175***	229***	692***	1,110***
EI weeks (weeks)	1.7***	-0.5***	-0.7***	0.5***	0.6***	0.4**	0.6***	1.5***	2.7***
SA benefits ($)	-87**	-275***	-195***	-189***	-155***	-173***	-210***	-923***	-1,286***
Dependence on income support (percentage points)	11.2***	-1.7***	-3.7***	-1.2**	-0.6	-1.4***	-1.8***	N/a	N/a
2007-2008 participants (n=1,559)									
Employment earnings ($)	-3,751***	-3,163***	2,950***	3,775***	4,853***	N/a	N/a	11,578***	4,639**
Incidence of employment (percentage points)	-13.4***	-1.6	5.2***	5.3***	6.0***	N/a	N/a	N/a	N/a
EI benefits ($)	463***	-300***	-440***	44	-118	N/a	N/a	-514**	-351
EI weeks (weeks)	1.6***	-1.1***	-1.5***	0.0	-0.6**	N/a	N/a	-2.2***	-1.7
SA benefits ($)	-97*	-346***	-296***	-330***	-260***	N/a	N/a	-882***	-1,329***
Dependence on income support (percentage points)	11.7***	-2.9***	-6.0***	-3.6***	-4.5***	N/a	N/a	N/a	N/a
Sub-Groups of Former Claimants									
Youth (under 30 years old) – 2002-2005 participants (n=1,112)									
Employment earnings ($)	-2,728***	-2,733***	1,438***	2,308***	2,221***	2,749***	2,911***	11,626***	6,165**
Incidence of employment (percentage points)	-11.5***	-2.8**	4.7***	4.9***	2.8**	2.1	3.5**	N/a	N/a
EI benefits ($)	560***	-52	-180**	207*	250**	78	148	503	1,011**
EI weeks (weeks)	1.8***	-0.3	-0.9***	0.5	0.6*	0.1	0.3	0.6	2.1
SA benefits ($)	52	-262***	-227***	-214***	-218***	-233***	-208***	-1,099***	-1,309***
Dependence on income support (percentage points)	11.6***	-0.8	-5***	-1.7*	-0.8	-2.6**	-2.1**	N/a	N/a
Long-tenured workers – 2007-2009 participants (n=398)									
Employment earnings ($)	-5,518***	-7,206***	-1,015	1,079	2,456	N/a	N/a	2,580	-10,312**
Incidence of employment (percentage points)	-7.7***	-5.6**	2.2	2.0	2.4	N/a	N/a	N/a	N/a
EI benefits ($)	1,024***	128	-94	23	184	N/a	N/a	113	1,264
EI weeks (weeks)	2.7***	0.1	-0.6	-0.3	0.1	N/a	N/a	-0.8	2.0
SA benefits ($)	-60	-141	-78	-132	-7	N/a	N/a	-212	-408
Dependence on income support (percentage points)	9.8***	1.3	-1.8	-1.5	-1.3	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table B4. Cost-benefit results from the social perspective for Training Services

Total Costs and Benefits Over Participation (1 to 2 years) and 6 Years Post-Program	Active Claimants (n=8,850)	Former Claimants (n=4,099)
Program cost	-$10,258	-$9,759
Marginal social costs of public funds	-$2,129	-$1,413
Employment earnings	$8,267	$14,263
Fringe benefit	$1,240	$2,139
Net present value (By how much do the benefits exceed the costs 6 years after participation?)	**-$2,880**	**$5,230**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)	**$1.40**	**$0.70**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**6.7 years after participation**	**4.8 years after program end**

Appendix C – Detailed results Apprentices

Table C1. Socio-demographic and labour market characteristics of Apprentices participants

	Active Claimants		Former Claimants	
	2003 to 2005	2013 to 2014	2003 to 2005	2013 to 2014
Number of observations	5,236	2,093	146	263
Gender				
Male	96%	92%	92%	90%
Female	4%	8%	8%	7%
Missing	0%	0%	0%	3%
Age				
Under 25	50%	18%	37%	22%
25-34	37%	58%	44%	51%
35-44	11%	18%	16%	19%
45-54	2%	5%	3%	6%
55 and over	0%	1%	0%	2%
Socio-demographic group				
Aboriginal individual*	2%	7%	5%	8%
Person with disability*	1%	2%	2%	3%
Visible minority*	1%	7%	3%	7%
Immigrant	3%	4%	2%	6%
Skills level related to National Occupation Code associated with the last EI claim opened before Apprentices participation[1]				
Managerial	0%	0%	3%	1%
University	0%	0%	1%	2%
College or apprenticeship training	86%	89%	39%	64%
Secondary or occupational training	4%	3%	33%	14%
On-the-job training	9%	8%	24%	19%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$24,385	$31,302[3]	$19,141	$23,490[3]
Proportion employed	100%	100%	94%	98%
Proportion on EI	21%	31%	45%	47%
Proportion on SA	1%	2%	5%	2%

Proportions may not add up to 100% due to rounding.

*Status self-reported by participant.

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level)
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings, EI benefits and SA benefits for 2013−2014 participants have been adjusted according to the Consumer Price Index (CPI), published by Statistics Canada, to the 2002 base year.

Table C2. Labour market outcomes for active claimants who started Apprentices in 2003-2005

Average outcomes	Pre-program period					After the program start year							
	5 years pre	4 years pre	3 years pre	2 years pre	1 year pre	Program start year	1 year	2 years	3 years	4 years	5 years	6 years	7 years
Earnings including $0	$15,006	$17,262	$19,121	$21,327	$26,403	$27,060	$32,930	$38,819	$46,254	$49,318	$50,172	$52,370	$54,823
Earnings excluding $0[1]	$15,929	$18,131	$19,980	$21,842	$26,485	$27,123	$33,472	$39,931	$48,028	$52,189	$53,990	$56,807	$60,286
Proportion employed	94%	95%	96%	98%	100%	100%	98%	97%	96%	95%	93%	92%	91%
Proportion on EI	19%	22%	25%	25%	24%	98%	73%	60%	38%	25%	25%	24%	20%
EI benefits	$707	$846	$948	$965	$804	$2,842	$2,386	$2,053	$1,370	$1,166	$1,407	$1,384	$1,112
Number of weeks on EI	3wk	3wk	3wk	3wk	3wk	9wk	7wk	5wk	4wk	3wk	3wk	3wk	2wk
Proportion on SA	6%	5%	4%	3%	1%	0%	1%	0%	1%	1%	1%	1%	1%
SA benefits	$191	$154	$121	$90	$28	$5	$13	$9	$23	$25	$53	$53	$62
Dependence on income support	7%	6%	7%	6%	4%	11%	9%	7%	4%	4%	5%	5%	4%
Proportion self-employed	7%	8%	8%	9%	12%	16%	18%	19%	20%	21%	20%	19%	18%

N= 3,920. Data excludes individuals with no Canada Revenue Agency data for the 5 years before participation.
[1]Earnings outcomes for all individuals covered by the study.
[2]Earnings outcomes excluding individuals who reported no earnings in a given year.

Table C3. Labour market outcomes for former claimants who started Apprentices in 2003-2005

Average outcomes	Pre-program period					After the program start year							
	5 years pre	4 years pre	3 years pre	2 years pre	1 year pre	Program start year	1 year	2 years	3 years	4 years	5 years	6 years	7 years
Earnings including $0	$17,115	$19,047	$19,977	$20,098	$20,326	$20,484	$24,760	$31,727	$36,002	$43,501	$42,004	$43,785	$44,771
Earnings excluding $0[1]	$18,008	$20,050	$21,404	$21,508	$21,765	$21,185	$25,390	$32,269	$37,568	$44,617	$44,255	$47,538	$49,484
Proportion employed	95%	95%	93%	93%	93%	97%	98%	98%	96%	98%	95%	92%	91%
Proportion on EI	21%	28%	39%	43%	46%	44%	52%	65%	58%	44%	48%	37%	36%
EI benefits	$745	$1,076	$1,666	$1,665	$2,057	$1,317	$1,885	$2,097	$1,984	$1,815	$2,583	$2,159	$2,691
Number of weeks on EI	3wk	4wk	6wk	5wk	7wk	4wk	6wk	6wk	5wk	5wk	7wk	5wk	5wk
Proportion on SA	10%	5%	7%	5%	4%	7%	4%	3%	1%	2%	3%	4%	2%
SA benefits	$376	$219	$240	$99	$120	$191	$92	$143	$10	$36	$132	$211	$215
Dependence on income support	9%	8%	13%	11%	13%	11%	10%	9%	7%	7%	11%	9%	13%
Proportion self employed	7%	8%	6%	12%	16%	19%	21%	23%	20%	23%	27%	25%	26%

N= 123 Data excludes individuals with no Canada Revenue Agency data for the 5 years before participation.
[1]Earnings outcomes for all individuals covered by the study.
[2]Earnings outcomes excluding individuals who reported no earnings in a given year.

Appendix D – Detailed results Wage Subsidy Work Experience Placement

Table D1. Socio-demographic and labour market characteristics of Wage Subsidy Work Experience Placement participants

	Active Claimants		Former Claimants	
	2002-2005	2007-2008	2002-2005	2007-2008
Number of observations	3,396	1,491	3,006	1,289
Gender				
Male	54%	43%	56%	41%
Female	46%	56%	43%	59%
Missing	1%	0%	1%	0%
Age				
Under 25	12%	9%	12%	12%
25-34	29%	26%	33%	31%
35-44	29%	26%	29%	28%
45-54	23%	27%	20%	20%
55 and over	8%	11%	7%	9%
Socio-demographic group				
Aboriginal individual*	4%	5%	4%	8%
Person with disability*	7%	8%	7%	8%
Visible minority*	7%	8%	9%	10%
Immigrant	8%	13%	9%	13%
Marital status				
Married or common-law	46%	44%	40%	41%
Widow / divorced or separated	15%	14%	16%	14%
Single	36%	38%	40%	41%
Missing data / unknown	2%	3%	4%	4%
Skills level related to National Occupation Code associated with the last EI claim opened before Wage Subsidy participation[1]				
Managerial	7%	9%	5%	8%
University	7%	5%	9%	7%
College or apprenticeship training	30%	27%	26%	28%
Secondary or occupational training	39%	40%	39%	38%
On-the-job training	17%	18%	21%	20%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$21,629	$24,848[3]	$11,317	$15,055[3]
Proportion employed	97%	99%	82%	90%
Proportion on EI	46%	38%	62%	59%
Proportion on SA	7%	4%	13%	7%

Proportions may not add up to 100% due to rounding.

*Status self-reported by participant.

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level).
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2007-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table D2. Incremental impacts for Wage Subsidy Work Experience Placement – active claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS									
2002-2005 participants (n=3,395)									
Employment earnings ($)	-1,404***	1,729***	2,233***	3,104***	3,735***	4,326***	4,079***	17,470***	17,795***
Incidence of employment (percentage points)	3.7***	7.6***	5.8***	6.3***	5.9***	5.7***	5.1***	N/a	N/a
EI benefits ($)	149**	-573***	-209***	-75	-80	-109*	9	-465**	-889***
EI weeks (weeks)	0.3	-1.6***	-0.4**	-0.3	-0.3	-0.3	0	-1.2*	-2.4***
SA benefits ($)	-62***	-87***	-112***	-90***	-85***	-74**	-81***	-441***	-591***
Dependence on income support (percentage points)	1.6***	-5***	-0.9	-0.3	0	-0.1	1.3**	N/a	N/a
2007-2008 participants (n=1,491)									
Employment earnings ($)	-62	3,327***	3,121***	3,141***	3,756***	N/a	N/a	9,957***	13,186***
Incidence of employment (percentage points)	6.1***	10.0***	7.1***	5.9***	6.5***	N/a	N/a	N/a	N/a
EI benefits ($)	-326*	-696***	113	-161	-111	N/a	N/a	-158	-1,180**
EI weeks (weeks)	-1.4***	-2.1***	0.5	-0.3	-0.4	N/a	N/a	-0.2	-3.7**
SA benefits ($)	-48*	-66*	-56	-23	12	N/a	N/a	-67	-181
Dependence on income support (percentage points)	-5.0***	-8.9***	-0.8	-1.8	-1.5	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS									
Youth (under 30 years old) – 2002-2005 participants (n=900)									
Employment earnings ($)	-726**	1,696***	1,545***	1,967***	2,365***	2,732***	2,919***	11,528***	12,498***
Incidence of employment (percentage points)	3.5***	7.1***	4.1***	3.5***	1.8	-0.1	1.4	N/a	N/a
EI benefits ($)	-398***	-735***	-188*	94	112	144	184	346	-787*
EI weeks (weeks)	-1***	-2.1***	-0.3	0.2	0.3	0.5	0.6	1.3	-1.8
SA benefits ($)	-59	-88**	-55	-37	-89*	-80	-98*	-359	-506*
Dependence on income support (percentage points)	-3.5***	-7.8***	-0.8	-0.6	-1.3	0.2	0.6	N/a	N/a
Older workers (55 years old and over) – 2002-2005 participants (n=267)									
Employment earnings ($)	-3,056***	1,635	3,195**	4,957***	4,540***	4,814***	3,507**	21,012***	19,591**
Incidence of employment (percentage points)	3.2	12.1***	9.9***	13.6***	16.5***	16.9***	12.6***	N/a	N/a
EI benefits ($)	1,066***	-808***	-142	-280	299	43	261	182	440
EI weeks (weeks)	3***	-2.3***	0.3	-0.4	1.2*	0.3	0.9	2.2	2.8
SA benefits ($)	10	29	-3	-16	-15	22	-38	-49	-11
Dependence on income support (percentage points)	2.7	-8.4***	-0.2	-2.7*	1.6	-0.5	1.6	N/a	N/a
Long-tenured workers- 2007-2009 participants (n=1,440)									
Employment earnings ($)	-3,234***	411	1,263**	2,581***	3,282***	N/a	N/a	7,149***	4,336*
Incidence of employment (percentage points)	3.3***	9.3***	6.3***	6.0***	6.3***	N/a	N/a	N/a	N/a
EI benefits ($)	880***	-75	94	-159	-76	N/a	N/a	-141	664*
EI weeks (weeks)	1.3***	-0.6	0.5	-0.3	-0.2	N/a	N/a	0.0	0.7
SA benefits ($)	-26***	-24	16	34	25	N/a	N/a	66	16
Dependence on income support (percentage points)	1.6**	-4.3***	1.5**	-0.4	-0.8	N/a	N/a	N/a	N/a

Significance level *** 1%, ** 5%, * 10%

Table D3. Incremental impacts for Wage Subsidy Work Experience Placement – former claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
FORMER CLAIMANTS									
2002-2005 participants (n=3,086)									
Employment earnings ($)	2,603***	4,132***	2,740***	2,609***	2,482***	2,697***	2,799***	13,327***	20,062***
Incidence of employment (percentage points)	12.2***	10***	5.9***	5.2***	5.5***	4.3***	4.5***	N/a	N/a
EI benefits ($)	118*	337***	371***	211***	163***	110*	44	899***	1,354***
EI weeks (weeks)	0.4	1.3***	1.3***	0.6***	0.4*	0.3	0.1	2.8***	4.4***
SA benefits ($)	-278***	-287***	-203***	-178***	-147***	-114**	-123***	-765***	-1,329***
Dependence on income support (percentage points)	-6.3***	-1.8***	-0.1	-0.5	-0.7	-0.8	-1.6**	N/a	N/a
2007-2008 participants (n=1,289)									
Employment earnings ($)	4,447***	5,257***	2,920***	2,510***	2,323***	N/a	N/a	7,643***	17,283***
Incidence of employment (percentage points)	10.9***	9.5***	5.4***	3.7***	3.9***	N/a	N/a	N/a	N/a
EI benefits ($)	262**	580***	859***	443***	128	N/a	N/a	1,430***	2,191***
EI weeks (weeks)	0.8**	1.6***	2.5***	1.4***	0.5	N/a	N/a	4.4***	6.8***
SA benefits ($)	-334***	-480***	-347***	-216***	-88	N/a	N/a	-657***	-1,470***
Dependence on income support (percentage points)	-6.2***	-2.1**	1.8*	0.6	-0.2	N/a	N/a	N/a	N/a
SUB-GROUPS OF FORMER CLAIMANTS									
Youth (under 30 years old) – 2002-2005 participants (n=878)									
Employment earnings ($)	2,105***	3,272***	1,959***	1,198*	921	2,053**	2,187**	8,319***	13,696***
Incidence of employment (percentage points)	8.4***	7.4***	2.8**	2.6*	1.8	0.7	0.9	N/a	N/a
EI benefits ($)	396***	239**	380***	180*	101	11	83	754	1,369***
EI weeks (weeks)	0.3	0.8**	1.1***	0.4	0.1	-0.1	0.1	1.6	2.8
SA benefits ($)	-337***	-226***	-174***	-161***	-66	-85	7	-478	-1,040***
Dependence on income support (percentage points)	-4.7***	-1.8*	0.1	-0.7	-0.3	-1.1	-0.1	N/a	N/a
Long-tenured workers- 2007-2009 participants (n=619)									
Employment earnings ($)	5,058***	5,303***	3,143***	2,306**	2,307**	N/a	N/a	7,755**	18,116***
Incidence of employment (percentage points)	9.7***	9.3***	6.0***	4.2*	2.8	N/a	N/a	N/A	N/A
EI benefits ($)	-76	533***	717***	257	138	N/a	N/a	1,112**	1,569
EI weeks (weeks)	-0.1	1.7***	2.0***	0.7	0.5	N/a	N/a	3.3***	4.8***
SA benefits ($)	-227***	-177**	-43	-62	-31	N/a	N/a	-135	-539
Dependence on income support (percentage points)	-9.2***	1.2	3.6**	1.0	0.1	N/a	N/a	N/A	N/A

Significance level *** 1%; ** 5%; * 10%

Table D4. Cost-benefit results from the social perspective for Wage Subsidy Work Experience Placement

Total costs and benefits over participation (1 to 2 years) and 6 years post-program	ACTIVE CLAIMANTS (n=3,395)	FORMER CLAIMANTS (n=3,006)
Program cost	-$8,655	-$6,784
Marginal social costs of public funds	-$904	-$683
Employment earnings	$17,705	$19,441
Fringe benefit	$2,656	$2,916
Net present value *(By how much do the benefits exceed the costs 6 years after participation?)*	**$10,802**	**$14,891**
Cost-benefit ratio *(How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)*	**$0.40**	**$0.30**
Payback period *(How many years after participation would it take for the benefits to recover the costs?)*	**3.2 years after participation**	**0.1 year after participation**

Appendix E – Detailed results Self-Employment

Table E1. Socio-demographic and labour market characteristics of Self-Employment participants

	Active Claimants		Former Claimants	
	2002-2005	2007-2008	2002-2005	2007-2008
Number of observations	4,499	1,764	2,118	1,014
Gender				
Male	51%	40%	43%	31%
Female	48%	60%	56%	69%
Missing	1%	0%	1%	0%
Age				
Under 25	3%	3%	4%	5%
25-34	27%	30%	30%	33%
35-44	35%	28%	35%	30%
45-54	26%	27%	22%	21%
55 and over	9%	11%	9%	10%
Socio-demographic group				
Aboriginal individual*	3%	3%	3%	5%
Person with disability*	4%	5%	7%	6%
Visible minority*	7%	8%	12%	10%
Immigrant	11%	13%	15%	16%
Marital status				
Married or common-law	54%	51%	52%	57%
Widow / divorced or separated	15%	14%	15%	13%
Single	29%	30%	29%	25%
Missing data / unknown	2%	5%	4%	4%
Skills level related to National Occupation Code associated with the last EI claim opened before Self-Employment participation[1]				
Managerial	11%	13%	10%	11%
University	15%	11%	15%	11%
College or apprenticeship training	36%	39%	30%	31%
Secondary or occupational training	30%	28%	33%	34%
On-the-job training	8%	10%	12%	14%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$27,569	$27,618[3]	$10,234	$12,200[3]
Proportion employed	98%	99%	76%	83%
Proportion on EI	46%	44%	66%	69%
Proportion on SA	4%	2%	7%	4%

Proportions may not add up to 100% due to rounding.
*Status self-reported by participant.
[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:
- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level).
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).
[2]Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.
[3]Earnings for 2007-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table E2. Incremental impacts for Self Employment – active claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS									
2002-2005 Participants (n=4,499)									
Employment earnings ($)	-8,552***	-13,161***	-10,500***	-8,987***	-7,795***	-6,831***	-6,109***	-40,222***	-61,935***
Incidence of employment (percentage points)	-12***	-27.5***	-20.6***	-17.5***	-13.8***	-12.8***	-12.3***	N/a	N/a
EI benefits ($)	3,582***	2,124***	-957***	-681***	-501***	-473***	-482***	-3,095***	2,611***
EI weeks (weeks)	9.7***	6.3***	-3***	-2.1***	-1.4***	-1.3***	-1.3***	-9***	7***
SA benefits ($)	-18	-26	-10	-36	-50**	-51***	-61*	-207	-252
Dependence on income support (percentage points)	23.8***	25.8***	-3.3***	-3.5***	-2.8***	-2.2***	-2.4***	N/a	N/a
2007-2008 Participants (n=1,764)									
Employment earnings ($)	-8,799***	-13,717***	-10,521***	-8,450***	-7,806***	N/a	N/a	-26,746***	-49,210***
Incidence of employment (percentage points)	-10.4***	-27.3***	-17.7***	-13.8***	-13.1***	N/a	N/a	N/a	N/a
EI benefits ($)	2,163***	-718***	-1,723***	-1,155***	-735***	N/a	N/a	-3,613***	-2,168***
EI weeks (weeks)	4.8***	-2.6***	-4.7***	-3.1***	-1.8***	N/a	N/a	-9.5***	-7.3***
SA benefits ($)	-1	-51**	-83***	-71**	-79**	N/a	N/a	-233**	-286**
Dependence on income support (percentage points)	19.6***	8.0***	-9.6***	-7.7***	-4.6***	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS									
Older workers (55 years old and over) – 2002-2005 participants (n=387)									
Employment earnings ($)	-6,797***	-9,435***	-6,522***	-3,676***	-2,109***	-905***	-823***	-14,036***	-30,268***
Incidence of employment (percentage points)	-9.1***	-17***	-13.1***	-5.2*	-6.3**	-3.2	-3.2	N/a	N/a
EI benefits ($)	3,248***	1,588***	-1,035***	-677***	-455***	-389**	-98	-2,655***	2,181**
EI weeks (weeks)	9.3***	4.9***	-3.4***	-2.2***	-1.4***	-1.2**	-0.2	-8.4***	5.8**
SA benefits ($)	-65	-74	-1	52	19	-33	-71	-34	-173
Dependence on income support (percentage points)	19.9***	21.6***	-3.4**	-2.9**	-2.4*	-2.1	-0.8	N/a	N/a
Long-tenured workers- 2007-2009 participants (n=1,198)									
Employment earnings ($)	-10,702***	-17,700***	-15,484***	-13,926***	-13,148***	N/a	N/a	-42,558***	-70,960***
Incidence of employment (percentage points)	-9.3***	-28.8***	-22.4***	-19.1***	-17.7***	N/a	N/a	N/a	N/a
EI benefits ($)	3,055***	897***	-1,141***	-876***	-495***	N/a	N/a	-2,512***	1,440***
EI weeks (weeks)	6.5***	1.6***	-3.0***	-2.3***	-1.2***	N/a	N/a	-6.4***	1.7***
SA benefits ($)	3	-41**	-59***	-49***	-61***	N/a	N/a	-169***	-207***
Dependence on income support (percentage points)	21.5***	17.7***	-4.6***	-4.7***	-3.4***	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table E3. Incremental impacts for Self Employment – former claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
FORMER CLAIMANTS									
2002-2005 Participants (n=2,118)									
Employment earnings ($)	-4,539***	-7,663***	-6,874***	-5,708***	-5,212***	-4,514***	-4,443***	-26,751***	-38,953***
Incidence of employment (percentage points)	-20.3***	-23.2***	-16.2***	-12.9***	-10.2***	-8.5***	-6.5***	N/a	N/a
EI benefits ($)	386***	-432***	-551***	-433***	-323***	-203***	-287***	-1,798***	-1,844***
EI weeks (weeks)	1.4***	-1.7***	-1.9***	-1.3***	-1.2***	-0.9***	-1.1***	-6.3***	-6.6***
SA benefits ($)	-327***	-284***	-164***	-145***	-130***	-166***	-154***	-760***	-1,371***
Dependence on income support (percentage points)	7***	-5.6***	-5.8***	-4.8***	-3.7***	-3***	-3.5***	N/a	N/a
2007-2008 Participants (n=1,014)									
Employment earnings ($)	-7,108***	-9,350***	-7,359***	-6,915***	-8,094***	N/a	N/a	-22,315***	-38,729***
Incidence of employment (percentage points)	-23.4***	-27.1***	-19.1***	-16.4***	-15.9***	N/a	N/a	N/a	N/a
EI benefits ($)	690***	-1,033***	-1,155***	-709***	-534***	N/a	N/a	-2,397***	-2,741***
EI weeks (weeks)	1.9***	-2.9***	-3.2***	-1.8***	-1.4***	N/a	N/a	-6.4***	-7.4***
SA benefits ($)	-357***	-383***	-291***	-256***	-233***	N/a	N/a	-780***	-1,519***
Dependence on income support (percentage points)	11.2***	-9.5***	-10.6***	-7.1***	-6.5***	N/a	N/a	N/a	N/a
SUB-GROUPS OF FORMER CLAIMANTS									
Youth (under 30 years old) – 2002-2005 participants (n=336)									
Employment earnings ($)	-4,947***	-8,561***	-7,303***	-7,075***	-6,476***	-6,035***	-5,890***	-32,779***	-46,287***
Incidence of employment (percentage points)	-22.5***	-30.9***	-19.6***	-19***	-15.1***	-13.2***	-12.5***	N/a	N/a
EI benefits ($)	222	-801***	-930***	-772***	-859***	-774***	-774***	-4,109***	-4,689***
EI weeks (weeks)	0.9	-2.5***	-3.3***	-2.2***	-2.5***	-2.1***	-1.7***	-11.7***	-13.3***
SA benefits ($)	-462***	-361***	-186**	-119	-87	-154*	-199**	-746*	-1,569***
Dependence on income support (percentage points)	5.6**	-9.2***	-8.9***	-5.9***	-6.4***	-6.8***	-6.6***	N/a	N/a
Long-tenured workers- 2007-2009 participants (n=345)									
Employment earnings ($)	-7,345***	-11,365***	-10,506***	-9,548***	-9,819***	N/a	N/a	-29,873***	-48,582***
Incidence of employment (percentage points)	-19.7***	-25.9***	-21.5***	-19.4***	-19.3***	N/a	N/a	N/a	N/a
EI benefits ($)	702**	-793***	-817***	-598***	-797***	N/a	N/a	-2,212***	-2,303***
EI weeks (weeks)	1.8**	-2.2***	-2.4***	-1.3**	-2.1***	N/a	N/a	-5.8***	-6.3***
SA benefits ($)	-166*	-153	-59	-13	-158*	N/a	N/a	-230	-550
Dependence on income support (percentage points)	10.6***	-5.1***	-4.3**	-2.3	-4.5**	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Appendix F – Detailed results Job Creation Partnerships

Table F1. Socio-demographic and labour market characteristics of Job Creation Partnerships participants

	Active Claimants		Former Claimants	
	2002-2005	2007-2008	2002-2005	2007-2008
Number of observations	463	169	495	242
Gender				
Male	46%	34%	60%	52%
Female	53%	66%	39%	48%
Missing	1%	0%	1%	0%
Age				
Under 25	13%	8%	10%	9%
25-34	31%	26%	33%	25%
35-44	27%	27%	26%	26%
45-54	22%	27%	21%	31%
55 and over	6%	12%	8%	10%
Socio-demographic group				
Aboriginal individual*	7%	9%	11%	23%
Person with disability*	7%	6%	6%	4%
Visible minority*	4%	4%	6%	7%
Immigrant	3%	2%	4%	3%
Marital status				
Married or common-law	34%	31%	31%	36%
Widow / divorced or separated	15%	13%	13%	14%
Single	48%	53%	51%	43%
Missing data / unknown	4%	3%	5%	8%
Skills level related to National Occupation Code associated with the last EI claim opened before Job Creation Partnership participation[1]				
Managerial	7%	7%	5%	5%
University	9%	8%	10%	5%
College or apprenticeship training	29%	33%	26%	33%
Secondary or occupational training	35%	32%	33%	35%
On-the-job training	20%	20%	26%	22%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$17,324	$19,457[3]	$8,345	$9,461[3]
Proportion employed	97%	99%	79%	88%
Proportion on EI	55%	51%	65%	64%
Proportion on SA	10%	6%	18%	13%

Proportions may not add up to 100% due to rounding.

*Status self-reported by participant.

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level).
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2007-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table F2. Incremental impacts for Job Creation Partnerships – active claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS									
2002-2005 Participants (n=463)									
Employment earnings ($)	-6,533***	-2,564***	800	1,536*	2,715***	2,983***	2,639**	10,675***	1,577
Incidence of employment (percentage points)	N/a	N/a	5.3***	3.4*	3.4*	3.5*	1.5	N/a	N/a
EI benefits ($)	3,939***	486**	4	524***	354**	652***	572***	2,107***	6,532***
EI weeks (weeks)	11.2***	0.2	-0.3	1.3**	0.8	1.4***	1.4***	4.6***	16***
SA benefits ($)	-200***	-98	-135	-69	33	60	28	-84	-382
Dependence on income support (percentage points)	25.5***	1.4	-3.7***	-0.7	-0.3	1.1	1.8	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table F3. Incremental impacts for Job Creation Partnerships – former claimants

Indicators	In-program period		Post-program period						Total in- and post-program
	Program start year	Additional year	1st year	2nd year	3rd year	4th year	5th year	Total post	
FORMER CLAIMANTS									
2002-2005 Participants (n=495)									
Employment earnings ($)	-3,174***	-1,549**	463	-285	1,122	526	42	1,868	-2,855
Incidence of employment (percentage points)	N/a	N/a	3.8	0.6	3.2	3.9*	3.1	N/a	N/a
EI benefits ($)	97***	-205	-46**	193	-137	313*	346*	670	561
EI weeks (weeks)	0.6	-0.9*	-0.1	0.7	-0.3	1.1**	1.3**	2.7	2.5
SA benefits ($)	-322***	-339***	-294***	-135	-94	-23	8	-539	-1,200**
Dependence on income support (percentage points)	1.4	-5.4	-4.7	-1	-1.9	0.7	2.6	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table F4. Cost-benefit results from the social perspective for Job Creation Partnerships

Total costs and benefits over participation (1 to 2 years) and 6 years post-program	**Active Claimants** (n=463)	**Former Claimants** (n=495)
Program cost	-$15,483	-$13,634
Marginal social costs of public funds	-$4,026	-$2,716
Employment earnings	$539	-$3,250
Fringe benefit	$81	-$488
Net present value (By how much do the benefits exceed the costs within 6 years after participation?)	**-$18,889**	**-$20,088**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve $1 in benefit 6 years after participation?)	**Negative benefits**	**Negative benefits**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**23.6 years after participation**	**Benefits may not recover the costs**

Appendix G – Detailed results Employment Assistance Services

Table G1. Socio-demographic and labour market characteristics of Employment Assistance Services participants

	Active Claimants		Former Claimants	
	2002-2005	2007-2008	2002-2005	2007-2008
Number of observations	58,115	28,985	34,956	19,023
Gender				
Male	50%	39%	52%	42%
Female	49%	61%	47%	58%
Missing	1%	0%	1%	0%
Age				
Under 25	11%	10%	11%	11%
25-34	27%	24%	29%	27%
35-44	29%	26%	30%	27%
45-54	23%	26%	22%	24%
55 and over	10%	12%	8%	11%
Socio-demographic group				
Aboriginal individual*	5%	6%	7%	9%
Person with disability*	7%	9%	11%	13%
Visible minority*	11%	13%	10%	13%
Immigrant	10%	13%	8%	12%
Marital status				
Married or common-law	44%	42%	34%	35%
Widow / divorced or separated	16%	14%	17%	15%
Single	38%	39%	43%	43%
Missing data / unknown	3%	4%	6%	7%
Skills level related to National Occupation Code associated with the last EI claim opened before Employment Assistance Services participation[1]				
Managerial	6%	7%	4%	4%
University	7%	5%	6%	4%
College or apprenticeship training	28%	27%	26%	25%
Secondary or occupational training	40%	39%	40%	40%
On-the-job training	20%	22%	25%	26%
Key labour market indicators in the year preceding the start of participation				
Earnings[2]	$22,702	$24,963[3]	$10,557	$13,533[3]
Proportion employed	97%	99%	79%	87%
Proportion on EI	46%	41%	55%	56%
Proportion on SA	6%	4%	19%	13%

Proportions may not add up to 100% due to rounding.

*Status self-reported by participant.

[1]Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claim they had before participating in EBSMs:

- Managerial: Management occupations.
- University: Occupations usually requiring university education (i.e. University degree at the bachelor's, master's or doctorate level).
- College or apprenticeship training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
- Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
- On-the-job training: On-the-job training is usually provided for occupations (i.e. short work demonstration or on-the-job training *or no* formal educational requirements).

[2] Average earnings for all individuals included in the studies. The average was calculated including participants who reported $0 earnings during that year.

[3]Earnings for 2007-2008 participants have been adjusted by the Consumer Price Index published by Statistics Canada, using 2002 as the base year.

Table G2. Incremental impacts for Employment Assistance Services – active claimants

Indicators	In-program period	Post-program period						Total in- and post-program
		1st year	2nd year	3rd year	4th year	5th year	Total post	
ACTIVE CLAIMANTS								
2002-2005 Participants (n=34,861 or a random sample of 60% of participants)								
Employment earnings ($)	-2,955***	-1,176***	-93	284	643***	927***	584	-2,371***
Incidence of employment (percentage points)	-0.3	1.3***	1.6***	2.5***	2***	2.1***	N/a	N/a
EI benefits ($)	580***	-451***	-326***	-193***	-169***	-144***	-1,284***	-704***
EI weeks (weeks)	1.8***	-1.3***	-1***	-0.6***	-0.5***	-0.4***	-3.8***	-2***
SA benefits ($)	52***	78***	53***	40***	37**	40**	248**	300***
Dependence on income support (percentage points)	5.4***	-1.2***	-1***	-0.4***	-0.2***	-0.1***	N/a	N/a
2007-2008 Participants (n=28,985)								
Employment earnings ($)	-2,577***	-511***	299***	801***	N/a	N/a	589	-1,988***
Incidence of employment (percentage points)	1.5***	3.6***	2.6***	3.0***	N/a	N/a	N/a	N/a
EI benefits ($)	475***	-507***	-337***	-298***	N/a	N/a	-1,142***	-667***
EI weeks (weeks)	0.9***	-1.7***	-0.9***	-0.8***	N/a	N/a	-3.4***	-2.5***
SA benefits ($)	43***	71***	34**	0	N/a	N/a	105**	148***
Dependence on income support (percentage points)	3.0***	-2.4***	-1.1***	-1.2***	N/a	N/a	N/a	N/a
SUB-GROUPS OF ACTIVE CLAIMANTS								
Youth (under 30 years old) – 2002-2005 participants (n=13,744)								
Employment earnings ($)	-1,766***	-122	501***	736***	953***	1,079***	3,147***	1,381
Incidence of employment (percentage points)	0.8**	2.3***	1.6***	1.7***	1.5***	0.7***	N/a	N/a
EI benefits ($)	334***	-476***	-270***	-106***	-46	-38	-936***	-602***
EI weeks (weeks)	1.4***	-1.7***	-0.7***	-0.3***	-0.1	0	-2.9***	-1.5***
SA benefits ($)	7	24	-17	-5	14	11	27	34
Dependence on income support (percentage points)	3.9***	-4.2***	-1.5***	-1.1***	-0.4	-0.2	N/a	N/a
Older workers (55 years old and over) – 2002-2005 participants (n=5,599)								
Employment earnings ($)	-2,857***	-935***	798***	1,619***	2,262***	2,754***	6,498***	3,641*
Incidence of employment (percentage points)	0.8	4.1***	6***	7.1***	7.8***	8.7***	N/a	N/a
EI benefits ($)	905***	-251***	-221***	18	87	154**	-213	692**
EI weeks (weeks)	3***	-0.5**	-0.5**	0.3	0.4*	0.6*	0.3	3.3***
SA benefits ($)	-54***	16	2	8	10	13	49	-5
Dependence on income support (percentage points)	6.5***	-0.8	-1.2**	1.3**	2***	2***	N/a	N/a
Long-tenured workers- 2007-2009 participants (n=15,708)								
Employment earnings ($)	-3,752***	-1,075***	371	840***	N/a	N/a	136	-3,616***
Incidence of employment (percentage points)	0.8***	3.3***	2.3***	2.5***	N/a	N/a	N/a	N/a
EI benefits ($)	1,049***	-162***	-382***	-262***	N/a	N/a	-805***	244*
EI weeks (weeks)	2.1***	-0.7***	-1.0***	-0.6***	N/a	N/a	-2.3***	-0.2
SA benefits ($)	21***	30***	9	-18	N/a	N/a	21	42
Dependence on income support (percentage points)	4.4***	-1.0**	-1.8***	-1.1***	N/a	N/a	N/a	N/a

Significance level *** 1%; ** 5%; * 10%

Table G3. Incremental impacts related to the timing of participation in Employment Assistance Services by cohort

Cohorts (start of EAS-only after start of an EI claim)	n=	In-program	Post-program period					Total impact post-program	Total impact in- and post-program
			1 year	2 years	3 years	4 years	5 years		
Employment Earnings ($)									
1–4 weeks	**13,380**	-434***	345***	2,076***	2,950***	3,294***	3,329***	11,993***	11,559***
5–8 weeks	**8,022**	-2,097***	-554***	1,081***	1,824***	2,713***	2,533***	7,596***	5,499***
9–12 weeks	**6,278**	-3,109***	-812***	566**	1,353***	1,919***	2,119***	5,145***	2,036*
2nd quarter	**12,469**	-4,967***	-1,467***	-261	283	770***	1,054***	379	-4,588***
3rd quarter	**6,571**	-6,809***	-1,292***	-667**	138	573*	711**	-537	-7,346***
4th quarter	**4,130**	-7,134***	-1,047***	-760**	-328	51	635	-1,448	-8,582***
Incidence of Employment (percentage points)									
1–4 weeks	**13,380**	3.4***	2.1***	1.8***	1.7***	1.2***	0.1	N/a	N/a
5–8 weeks	**8,022**	1.9***	1.1**	1.0**	1.0*	0.7	-0.3	N/a	N/a
9–12 weeks	**6,278**	0.8*	0.5	0.7	0.0	0.7	0.1	N/a	N/a
2nd quarter	**12,469**	-1.5***	-0.2	-0.5	-0.7*	-0.4	-0.8*	N/a	N/a
3rd quarter	**6,571**	-4.4***	-1.6***	-1.4**	-0.6	-0.8	-1.4	N/a	N/a
4th quarter	**4,130**	-7.3***	-1.5**	-1.4*	-1.0	-1.2	-0.8	N/a	N/a
EI Benefits ($)									
1–4 weeks	**13,380**	432***	165***	-213***	-94***	-38	24	-156	276**
5–8 weeks	**8,022**	1,301***	-40	-240***	-123***	-62*	16	-450***	851***
9–12 weeks	**6,278**	1,473***	-277***	-235***	-169***	-139***	-16	-836***	637***
2nd quarter	**12,469**	1,887***	-642***	-327***	-205***	-128***	-99***	-1,402***	485***
3rd quarter	**6,571**	1,952***	-1,443***	-450***	-324***	-157***	-114**	-2,488***	-536***
4th quarter	**4,130**	1,388***	-1,888***	-505***	-318***	-203***	-188***	-3,102***	-1,714***

* Significant at 10%; ** significant at 5%; *** significant at 1%

Table G4. Incremental impacts of Employment Assistance Services on time of return to employment

Cohorts (start of EAS-only after start of an EI claim)	1–4 weeks (N=13,380)	5–8 weeks (N=8,022)	9–12 week (N=6,278)	2nd quarter (N=12,469)	3rd quarter (N=6,571)	4th quarter (N=4,130)
Time of Return to Employment (in weeks)	3.5***	0.2***	-1.2***	-2.9***	-3***	-2.7***

* Significant at 10%; ** significant at 5%; *** significant at 1%

Table G5. Cost-benefit results from the social perspective for Employment Assistance Services

Total costs and benefits over participation (1 to 2 years) and 6 years post-program	Active Claimants (n=34,861)[1]
Program cost	-841
Marginal social costs of public funds	-233
Employment earnings	-1,703
Fringe benefit	-255
Net present value (By how much do the benefits exceed the costs within 6 years after participation?)	**-3,032**
Cost-benefit ratio (How much does it cost in EI part II funds to achieve 1 in benefit 6 years after participation?)	**Negative benefits**
Payback period (How many years after participation would it take for the benefits to recover the costs?)	**9.4 years after participation**

[1] Random sample of approximately 60% of participants

Appendix H – List of nine studies included in the Synthesis Report

Table H1. Overview of studies included in this Synthesis Report

Study	Evidence included in this summary report	Methods	Reference period	Observation period
Analysis of EBSM Profile, Outcomes and Medium-Term Incremental Impacts for 2002-2005 Participants in British Columbia (Completed in 2014)	- Incremental impacts for participants including youth and older workers - Profile and socio-demographic characteristics of participants	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling	2002-2005 participants	11 to 12 consecutive years between 1997 and 2011 (i.e. 5 years pre-program, 1 to 2 years in-program and 5 years post-program)
Effects of the Timing of Participation in Employment Assistance Services in British Columbia (Completed in 2014)	- Incremental impacts	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling		
Cost-Benefit Analysis of Employment Benefits and Support Measures (Completed in 2016)	- Cost-benefit analysis	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Cost analysis		7 to 8 years between 2002 and 2012 (i.e. 1 to 2 years in-program and 6 years post-program)
Analysis of EBSMs Profile, Outcomes and Incremental Impacts for 2007-2008 Participants in British Columbia (Completed in 2015)	- Incremental impacts - Profile and socio-demographic characteristics of participants	- Non-experimental method using propensity score matching in combination with Difference-in-Differences - Statistical profiling	2007-2008 participants	9 to 10 consecutive years between 2002 and 2012 (i.e. 5 years pre-program, 1 to 2 years in-program and 3 years post-program)
Analysis of EBSMs Profile, Outcomes, and Incremental Impacts for EI Claimants Category "Long-Tenured Workers" in British Columbia (Completed in 2016)	- Incremental impacts - Statistical profile of socio-demographic characteristics	- Propensity score matching and Difference-in-Differences - Statistical profiling	2007-2009 participants	9 to 10 consecutive years between 2002 and 2013 (i.e. 5 years pre-program, 1 to 2 years in-program and 3 years post-program)
Study on Employment Assistance Services (Completed in 2014)	- Program design and delivery - Challenges and lessons learned	- 10 key informants interviews - Literature and document review	Design and delivery at the time of the data collection (i.e. 2013)	
Study on Wage Subsidy Work Experience Placement (WS) in British Columbia (Completed in 2016)	- Program design and delivery - Challenges and lessons learned	- 8 key informants interviews - Literature and document review - Questionnaire filled by British Columbia officials	Design and delivery at the time of the data collection (i.e. 2015)	
Study of the Employment Program of British Columbia (EPBC) Training Services (Completed in 2016)	- Program design and delivery - Challenges and lessons learned	- 11 key informants interviews - Literature and document review - Questionnaire filled by British Columbia officials		
Study of Apprentices in British Columbia (Completed in 2016)	- Program design and delivery - Challenges and lessons learned	- 10 key informants interviews - Literature and document review - Questionnaire filled by British Columbia officials		